

THE MEDICAL AND SURGICAL REPORTER.

No. 1372.]

PHILADELPHIA, JUNE 16, 1883.

[Vol. XLVIII.—No. 24.]

ORIGINAL DEPARTMENT.

COMMUNICATIONS.

IS THE CURRENT THEORY THAT TYPHOID FEVER OWES ITS ORIGIN TO SEWER-GAS EXPLODED? AND IS THE GREATER FA- TALITY OF TYPHOID FEVER IN THE COUNTRY CAUSED BY GREATER IM- PURITY OF THE DRINKING-WATER COMPARED WITH THAT OF THE CITY?

BY DR. GEORGE HAMILTON,
Of Philadelphia.

In the discussion subsequent to the reading of a paper upon this subject before the College of Physicians, March 7, by the writer, not a little surprise must have been felt at the declaration by the pre-eminent sanitary engineer, George E. Waring, "that the sewer-gas theory in regard to typhoid fever was, in the opinion of sanitarians, exploded." This announcement is the more remarkable and important, standing, as it does, in antagonism to the teaching and recommendations of many professed sanitary engineers, "that every effort should be made to exclude sewer-gas from dwellings, regarding it as the general, if not the sole cause, not only of typhoid, but also of scarlet fever and diphtheria." Neither does this doctrine, nor do these recommendations, run counter to the opinions, nor fail to obtain the support, of a large majority of physicians. Many of the medical journals, and not a few professors, coincide in this view, and successfully impress its alleged correctness upon the mind of the inexperienced student and young practitioner. Quite recently there appeared in a medical journal a

paragraph, contributed by a somewhat conspicuous physician, to this effect: "Is it not surprising and incomprehensible that there can yet be found physicians who deny the agency of sewer-gas in causing typhoid fever, diphtheria, and scarlet fever?" When it is stated that the writer of this quotation was, and continues to be, one of the most zealous and positive in regard to sewer-gas being the effective agent in the production of the diseases just named, may we not imagine an increased degree of surprise when he learns that this pre-eminent sanitary engineer declares "that the sewer-gas theory is, in the opinion of sanitarians, exploded!"

The paper upon Sewer Gas, by Dr. Frank Hamilton, published some months ago in the *Popular Science Monthly*, with its numerous quotations, cannot be construed in opposition to the opinions heretofore, and at the present time, held by physicians, sanitarians, and the public generally. The special object of that paper was, in fact, to devise more certain and reliable measures to exclude from dwellings this alleged source of disease; and to accomplish this, as was believed, desirable and well-intentioned object, scientific plumbing and improved apparatus, erected in an annex outside of the residence, were recommended. The efforts to exclude the gas are, up to the present moment, incessant; nor is this surprising in view of what has just been stated. Whether the typhoid, the scarlatinal or the diphtheritic germ, or some special quality of the gas itself, dependent upon peculiar matters finding entrance to the sewers, and subjected to various degrees of warmth and moisture, be the deleterious agents in question, is immaterial; for, practically,

to admit the gas, is to admit one or other of these agents—to exclude the gas, is to exclude them. Attempts to diminish the importance of sewer-gas as the chief agent in causing typhoid fever and other affections are manifest enough, and efforts in this direction are doubtlessly made by those who candidly acknowledge that the reports of the Board of Health of this city, and those of New York, are in opposition thereto. But this is not all, for a very large proportion of those physicians who have had the most frequent and abundant opportunities to observe the origin, development, and progress of typhoid fever, either withhold their assent from the current views upon this subject, or positively deny that sewer-gas is the sole cause of typhoid fever, or that it exceeds all other agencies combined in originating this disease. Does it not seem passing strange in this connection, that while the Trousseaus, the Niemeyers, the Murchisons, the Bristowes, the Flints, the Jacksons, and many others of similar experience and capacity, entertain doubts in reference to certain points pertaining to the origin and progress of typhoid fever, and express their opinions in relation thereto with calm, philosophic, commendable reserve, very many others, of different qualifications and temperament, find no difficulty of this kind, but, on the contrary, armed *cap-à-pie*, are always ready to solve any question in regard to this subject. Unfortunately, these attempted solutions are too often merely bold, positive assertions, having no real basis of support, and this is seen in the statement by some, "that the families located in the wealthy and fashionable parts of Philadelphia and New York are most liable to attacks of typhoid fever," while the Reports of the Board of Health of both cities show, on the contrary, that the suburbs exhibit by far the largest number of cases. This accords perfectly with the testimony of the late Prof. John K. Mitchell, alluded to in my paper of the 7th of March, who, in consultation, told the writer and the late Dr. Louis P. Gebhard, "that he seldom saw cases of typhoid fever except on the outskirts of the city, where water-closets were scarcely known."

One of the great difficulties with the sanguine theorist is in relation to the greater prevalence and fatality of this disease in the country. But, as usual, the explanation is at hand in the fact, as he boldly asserts, that the drinking water is contaminated by the drainage from the necessary. Now, this assertion should, if believed, inspire far more dread than the sewer-gas theory ever did, even in its palmy days, long before the recent decree that it had been exploded was an-

nounced. What must now be the state of mind of the laborious farmer and family, in reflecting that to his own negligence or stupidity is he indebted for [this sad condition of his household? But the mischief does not end here; for what, it may be rationally be asked, is to become of the thousands upon thousands of our citizens who every summer gladly visit the country and seek boarding with the farmer, or select, for a season, the accommodations furnished by cottages or hotels; many of them for the express purpose of escaping, as they declare, the heated and impure air of the city, and the contaminated water of the Schuylkill, receiving constantly, as it is stated, an immense amount of impurity from Manayunk, and many other points nearer to Fairmount! As is well known, not a few of the country people, on visiting the city, alarmed by the exaggerated reports of the condition of the water, abstain, as far as possible, from its use. But admitting the supposition, for it is nothing more, to be true, as to the contamination of the water in the notably beautiful, rolling country of the counties around Philadelphia, how are we to explain the fact that at uncertain intervals a severe epidemic will suddenly appear—fever sometimes, dysentery at other times—and will just as suddenly disappear, and neither of these diseases again be seen, to any extent, for one or several years, precisely as has often occurred in this city, and elsewhere. To suppose that the water has thus suddenly changed from purity to impurity, and again as suddenly to purity, with no conceivable cause, either by the family or the medical attendant, is simply absurd.

Such a statement as was made in the discussion alluded to as to the condition of what were termed country towns in New England can have but limited application, and is completely at variance with the contents of a letter from a conspicuous physician in one of the New England States, who, after inquiry in regard to outbreaks of typhoid fever, had replies from about fifty practitioners in that State to this effect, that the rural sections suffered by far the most from epidemics of typhoid fever. Any one who has traveled over the rural sections of New England could not have failed to observe the generally excellent condition of the farms, whatever he may have noticed of a contrary character in some localities. But why go from our own city or vicinity? Have we not in this city, or within an hour's journey, numerous factories and densely peopled districts notorious, when compared with the country, for their filthiness, with cess-pools and innumerable privies almost in contact with dwellings, and, in many

cases, in consequence of the porous nature of the soil, filled to repletion, affording every opportunity for contamination of the water in comparison with the country?

To show how delusive plausibly-written accounts of the origin and spread of typhoid fever may be, let the following suffice: A woman, after nursing a relative during several weeks, returned, after the death of the patient, to her own residence, distant three miles. In a few days she was prostrated with typhoid fever—the disease of the relative. In succession, one after another was attacked, until four out of seven members of the family were down with the disease, one death ensuing from perforation.

In the discussion of the paper, one of those who had taken part thought there could be no difficulty in accounting for the attacks of the last three members, as the dejections from the bowels of the woman were cast out in such a way as to admit of drainage into the drinking-water, and that thus the typhoid germs were received into the stomachs of those last attacked. But, unfortunately for this solution, the drainage descended the slope from the source of the water to the requisite outhouse.

In another family of eight persons, quoted in the lecture of March 7th, seven were attacked with the fever, all of which, except a colored servant, were dangerous cases. As in the former instance, the disease did not originate upon the premises. A son had been sent about forty miles into Maryland, and after remaining there several weeks, was brought home sick with typhoid fever, and in succession six other members were prostrated with the same disease. The house was upon a hillside, and, as in the former case, the drainage was from the water in the direction of the outhouse, so that contamination of the water in either instance was impossible. Typhoid fever, scarlet fever, diphtheria and dysentery, may not, under certain favorable conditions, be contagious; but under other conditions, as when these diseases are malignant, and the subjects crowded together, for example, three in the same room, as occurred in the family just alluded to, they are regarded by an immense majority of the most able, unprejudiced, and experienced physicians, as eminently contagious.

Col. Waring, to his credit be it said, was commendably conservative in this discussion, not disposed to be dogmatic, and in regard to this special point merely said that "The literature of the subject seems to prove that typhoid fever, in the country, is due to drinking water which has become contaminated," knowing, doubtless, full

well, that a score of probabilities can avail nothing when confronted by a single irrefutable fact. To revert for a moment to sewer-gas, it appears, from the remarks of one of the disputants, to be now placed in a worse position than ever; for while it is admitted to be the *vehicle for conveying typhoid germs*, when it contains them (?) it is also declared to be "the most potent cause of the typhoid state." The importance of this statement will at once be appreciated when we call to mind that the typhoid state is the almost invariable concomitant of the latter stages of dangerous and fatal diseases, whether acute or chronic.

During the discussion, repeated appeals were made on behalf of cleanliness. But who ever heard of any one, who had the least regard to the amenities of life, opposed to cleanliness?—for is it not said to be "akin to godliness."

As pertinent to this subject, Dr. John Syer Britton, President of the Society of Medical Officers of Health, confessedly one of the most sagacious observers and logical thinkers of the day, writes as follows: "If we look to the remarkable influence which simple *variations of temperature and peculiarities of season* exert on the mortuary returns, in respect both of the number of deaths and the character of the fatal diseases, and compare therewith the comparatively small effect on the death-rate of even one of the most fatal of the zymotic diseases, or with the insignificant influence of deaths from enteric fever, diphtheria, and other affections, over which *sanitary science is supposed to exert a specially valuable influence*, we can scarcely avoid seeing, that on similar grounds, the deaths saved directly by the sanitary labors on which we are engaged, must, under any circumstances, be so few annually as to produce no *distinct and unmistakable effect on the mortuary rates*." This sincere and ingenuous avowal of opinion, by one so distinguished as an author and teacher, may well be commended to the serious consideration of those who, for years past, have boastingly promised the extinction of certain diseases, under certain impossible conditions, yet with no other result than that just presented by the above-named conscientious and distinguished authority in medical science.

VIEWS OF MORTALITY STATISTICS, WITH SPECIAL REFERENCE TO THE U. S. CENSUS RETURNS OF 1880.

BY THOS. S. SOSINSKEY, M. D., PH. D.,
Of Philadelphia.

(Continued from page 627.)

Altogether, then, I believe I have said enough

to show that Dr. Billings assumed a great deal when he ventured the opinion that the greater returns in 1880 than in 1870 were due to a better canvass of deaths.

Passing on a little further in Dr. Billings' introductory remarks, I find that he figures out "an average mortality of the whole country of 18.2 per 1,000 of living population per annum." "The actual mortality," says he, "for the whole country during the census year was not less than 17, nor greater than 19, per 1,000." Now, how did the ingenious Doctor find this out? Finding the difference between the enumerators' returns and the State returns to be as given above, he decided that "it may be considered certain that in no State is the deficiency in the enumerators' returns less than it is in Massachusetts." "If we suppose," says he, "that after the addition of the 61,020 cases of deaths reported by physicians* to the returns of the enumerators, these last, excluding the states and cities above mentioned, are still deficient as much as 30 per cent., which is believed to be the maximum, the result will be an average mortality for the whole country of 18.2 per 1,000 of living population per annum." It is hardly allowable to assume that the percentage of deficiency is about equal in different States, the state of concentration, the intelligence, and other peculiarities of the population, telling on the results. Here is a point of special moment, namely, the amount of mortality among infants. If the deficiency be greatest among infants, as Dr. Billings says it is, the fact that the returns show that the proportion of deaths of infants to those of persons of all ages varies greatly, would indicate a wide range of variation in the deficiency in different States. Thus, as will be shown below, the proportion of deaths of infants to the whole in Pennsylvania was 1 to 4.6, while in Kansas it was 1 to 2.6.

O Libitina, how very ignorant we are as to how many bodies pass into thy hands from year to year in this broad land! Little reliance can be placed in the truth of the conclusions of Dr. Billings. Such conclusions are little better than guesses, whereas there should be no guessing in making up vital statistics, otherwise they are no statistics at all. But what can be thought of the work of enumerators which is likely deficient in general to the extent of a third!

* Blank books were sent out by the Census Bureau to the physicians throughout the United States, in which to enter all deaths occurring in their practice during the census year. The 61,020 cases referred to were found, I understand, to have been omitted by the census enumerators.

In this connection I may remark, that I do not wish to convey the impression that I am of the opinion that the census returns of vital statistics are of no value. I believe they are of much value, giving as they do a vast deal of more or less definite information about the destructiveness of different diseases in different parts of the country, the relations of age, sex, and season to diseases, etc.

Having decided that the death-rate in the United States was somewhere between 17 and 19 per 1000 of the living population, Dr. Billings proceeds with great complaisance to say that "this rate compares favorably with that of all other civilized countries. The death-rate in the rural population of England, comprising ten and a half millions of people, in the year 1880, was 18.5 per 1000. For the whole of England for the same year it was 20.5 per 1000. For Scotland, it was 21.3 per 1000. For the mainland rural group of Scotland, for the same period, it was 17.3 per 1000."

This is distressing. I wonder when it will be generally known that comparing aggregate rates of mortality of different places is entirely unscientific and absurd. It is an error of a preposterous kind, one that the merest tyro should not commit. Especially is it absurd to compare the death-rates of long-settled, comparatively stable communities, with those of places of a reverse character. The only proper comparison of an aggregate rate of mortality is with the rate in the same place in preceding years; and this is not of much interest, or practical value, unless a detailed analysis of the causes of death, and the period of life at which they occurred, be made.

The period of life at which the deaths occurred is a very important point to know in considering death-rates, and especially if one would institute comparisons. There may be a great disproportion in the number of people of different ages who die in different places. A very large proportion may be of persons past middle life in one place, while the reverse may be the case in another. During the census year ending June 1, 1880, of the deaths returned, the proportion of those of persons under one year to the whole in Massachusetts was 1 to 4.5; in Illinois, 1 to 4.1; in Pennsylvania, 1 to 4.6; in Georgia, 1 to 3.9, and in Kansas, 1 to 2.6; and the proportion of those of persons under five years to the whole in Massachusetts was 1 to 3; in Illinois, 1 to 2.3; in Pennsylvania, 1 to 2.6; in Georgia, 1 to 2.1; in Kansas, 1 to 2.1. These are somewhat striking figures. It is scarcely necessary to remark that it is particularly lamentable

when there is a heavy mortality among persons in early adult and middle life. The life of a baby is of much less worth than that of a person arrived at maturity. A study of this kind may be pursued profitably from the standpoint of the political economist.

In any community, or country, it would be extremely desirable to know the proportion of deaths among persons of different ages, but such knowledge is not readily attainable in reliable shape. The ages given in the census returns are notoriously unreliable. Thus 1,282,253 were said to be ten; while only 1,256,956 were one year old; and 682,714 were said to be fifty, while only 323,608 were forty-one years old. Without a knowledge of the rate of death among persons of different ages, it is impossible to construct a table of the expectation of life; and as Dr. Parkes says this, that is, the mean future or after life-time, "is the true test of the health of a people." A table of this kind cannot be expected under any circumstances to be very accurate, but more especially for an unstable community.

In a country like ours, to which a vast current of healthy young people is flowing from Europe and elsewhere, the death-rate should not be as high as in the communities whence these came. For evidently when great numbers of the young adults go from a place, the proportion of old, sickly and very young persons is greatly increased, and of course it is among such that the bulk of the mortality occurs everywhere.

The movement of population going on in this country renders comparisons of the aggregate rates of mortality of different parts of it extremely unscientific and misleading.

The birth-rate in the United States is not as high as one might expect. In proportion to the number of marriages it is low, and, indeed, the tendency to check productiveness is growing more and more obvious to every thoughtful observer from year to year. It is far from being alike in all parts. But, altogether, there is great productiveness. This is one and the main reason why a considerable death-rate should be expected in the United States. Calculations show that the births to the population in 1870, according to the census returns, were 1 to 31, and in 1880, 1 to 30. In determining these figures, the deaths of children under one year were added to the number of children under one year living, and this number was taken from the whole population plus the number of deaths.

To illustrate how different the populations of different states are as regards age, I have com-

piled the following table from the statistics of 1880:

STATE.	AGE.				
	Under 2 yrs.	30 years . .	50 years . .	60 years . .	70 years . .
Massachusetts	15 41	56	118	196	
Michigan	26 50	88	145	324	
Kansas	16 50	105	310	605	
Illinois	19 50	85	121	371	
Pennsylvania	26 50	78	147	268	
New York	24 43	58	90	209	
New Jersey	31 45	65	102	331	

It is evident from this table that the babies are comparatively scarce in Massachusetts. There would seem to be something wrong with the women or with both sexes in that State. With so few infants, there should not be a high death-rate there, unless they are exceptionally degenerate as well as scarce. In Kansas it will be observed that one-sixteenth of the population are of children under two years of age. Evidently, if the babies were not healthy in that thriving State the death-rate should be high.

Massachusetts has a far greater proportion of persons of 30, 50, 60, and 70 years of age than any of the other States in the list. The comparative scarcity of children may account to some extent at least for this remarkable social feature of that State. The great proportion of old people there should tend to make the death-rate high.

As the table shows, $\frac{1}{15}$ of the population of Massachusetts were 70 years of age, while in Kansas the number was only $\frac{1}{25}$. Taking this statement as it stands, one would naturally conclude that the chance of living to be old is far better in Massachusetts than in Kansas. But the statement is misleading. It is akin to the obviously fallacious one that the small number of deaths of female in comparison with those of male Chinese in this country indicates that the former find it far more healthful than the latter. Kansas has comparatively few old people, because the population is, as a whole, of very recent growth. With so few old people, the death-rate should be extremely low, if it were not that the proportion of children (among whom there is always a pretty heavy mortality) is very large.

With apparent fullness of confidence in his philosophy, Dr. Billings remarks that "the low death-rate in this country is considered to be due to the comparative absence of overcrowding, and

to the more general and equable distribution of the means of supporting life, including especially the abundant food supply of good quality for all classes of the people." The Doctor assumes much in regarding the rate given by him as low; I take it to be high. A fresh, enterprising people, and one not disposed to be very prolific, should furnish a low death-rate. Anything above 15 per 1000 is excessive in most parts of the United States, and, indeed, in the country as a whole. Various points made above are confirmatory of the belief that the death-rate should be comparatively low. It is very questionable whether the "abundant food supply" argument of Dr. Billings is very forcible. I am rather inclined to hold that it is the reverse. A population that has little incentive to be frugal is not apt to be freest from disease, and the longest lived. Indulgence too generally attends plenty; and this vice hurries people prematurely into their graves. As Bacon well observed, life is not favored by "luxury and ease."

SULPHUR PREPARATIONS IN ACNE.

BY H. W. STELWAGON, M. D.,

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Sulphur, as a local application in the treatment of acne, has survived the deluge of new remedies; and although at times pushed momentarily to the background, it stands to-day the most reliable therapeutical agent for this affection. It has been employed in all of its various chemical preparations, and is so used at the present time. All are useful, and each has its advocates. Experience in their use, however, soon narrows the choice to a limited few. The most trustworthy of the preparations are the simple sulphur, either as the washed sulphur, precipitated sulphur, or flowers of sulphur, and sulphuret of potassium. There is very little difference in the varieties, so to speak, of plain sulphur, although preference is usually given to the precipitated. These two preparations, sulphur and the sulphuret of potassium, are not only the most valuable in their therapeutical effects, but also the cheapest—a small matter, it is true, yet of some importance. The plain sulphur may be used in various ways. In mild cases it may be employed simply as a toilet powder, and so used is frequently of advantage. As such, it should be dusted on the face at night by means of a powder brush and allowed to remain undisturbed until morning. The plan

is easy to carry out, and for that reason commends itself. It is, as a rule, less efficient than lotions or ointments, inasmuch as it is less intimately brought in contact with the skin. In the form of a lotion sulphur is often of great service. No better formula can be given than that containing a small amount of glycerine—ten minims to the ounce—and equal parts of alcohol and rose water. A combination, suggested by Dr. Bulkley, of a drachm of washed sulphur, a half fluid ounce of ether and three and a half fluid ounces of alcohol makes an excellent application, and is especially indicated in those cases in which comedones are predominant, or in which there is a moderate degree of seborrhœa present. Kummerfeld's lotion is another very useful combination:

R. Sulph. præcip.,	ʒ iv.
Pulv. camphoræ,	gr. x.
Pulv. tragacanth,	gr. xx.
Aquæ calcis,	
Aquæ rosæ,	āā f. ʒ ij.

M.

The proportion of sulphur in lotions should depend upon the effect produced, or to be produced; ten grains to a drachm or more to the ounce. A scruple to the ounce is a proportion most commonly used. Sulphur in ointment is another method in which this remedy may be advantageously employed. In the strength of one drachm to the ounce it is a very useful application. The percentage of sulphur in ointments is usually greater than in lotions, varying from twenty grains to the ounce up to equal parts.

The sulphuret of potassium, the other sulphur preparation which stands high in the treatment of acne, is, I think, superior to the simple sulphur, although it is not in such general use. This may be due to the fact that sulphur itself has been always used and considered "good for skin diseases," while the employment of the sulphuret of potassium is more recent and the knowledge of its application less wide-spread. The sulphuretted odor of the drug is a disadvantage, but it admits of correction if desired; besides, even in its undisguised condition, the odor is merely concomitant with the application, as a few minutes afterward it is scarcely noticeable.

It may be employed either as a lotion or as an ointment. The strength varies from five grains up to a half drachm to the ounce. The proportion which is most generally required is about fifteen grains to the ounce. The lotion may consist of a simple watery solution, or small quantities of alcohol and glycerine may be added at times with advantage; the former a half drachm to the ounce, and the latter about ten minims to

the ounce. The efficacy of such a lotion is in some instances increased by adding to it sulphate of zinc in the same proportion as the sulphuret of potassium.

An ointment may be ordered instead of a lotion, and is, occasionally, of greater service. The lotion, however, is less tenacious of its odor, and, on the whole, is probably more efficacious.

In the use of sulphur itself, preference is generally given to the ointment method; the sulphuret of potassium, on the contrary, is usually prescribed as a wash. In neither case is there any substantial reason for this, and it seems due merely to force of example or habit. It is a fact worth remembering that in some instances lotions prove of value where ointments had failed to benefit; the converse of this also holds true. Moreover, in some cases, sulphur itself may produce but little improvement, whereas marked advantage is found to follow a change to sulphuret of potassium, and *vice versa*.

The applications are best made at bed-time, as they are then less apt to be disturbed, and may remain on over night, and are moreover more comfortable and convenient for the patient.

Before applying the preparation, the face should be sponged with hot water for several minutes. The ointment then, if that is used, should be well rubbed in, and not disturbed until morning, when the face may be washed. If the lotion is employed, it should be well shaken, and rubbed on with a sponge or rag for three or four minutes, and allowed to dry and remain undisturbed until the face is washed the next morning.

It is well to intermit treatment every week for a few days in order that the furfuraceous desquamation which all such preparations are apt to produce, although slight and scarcely noticeable, may disappear. In this respect the ointments are far less objectionable, as the unguent, in a measure, prevents or conceals it.

The above preparations or combinations used in the manner described are, as I have repeatedly seen, productive of great benefit in cases of this disease: and conjoined with appropriate constitutional treatment, and perseveringly used, are in a fair proportion of the cases curative.

THE ABORTIVE TREATMENT OF VARIOLA.

BY W. R. CLARIDGE, M. D.,
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The *Southern Clinic* of last year contained a contribution from the pen of Dr. DeCailhol, of St. Louis, Mo., styled, "Variola—its treatment, its

prophylaxis," in the reading of which I was much interested, although unable to agree with the writer in his views respecting the inutility of vaccination. It was with what he styles the French abortive treatment I felt most interest. The Doctor states that during his last sojourn in Paris Dr. Mene, connected with one of the children's hospitals of that city, explained to him the benefit of his (Dr. M.'s) abortive treatment of variola, and that since his return to the United States he has tested its efficacy frequently, and has recommended it to many of his brother practitioners with satisfactory results. This was the use of salicylic acid.

Having been practicing medicine between twenty and thirty years, I have had during that time hundreds of cases of variola to treat, the disgusting character of which, together with the often unsatisfactory results, made me wish for some better methods of treatment than that usually resorted to, and desirous of trying this to me new remedy.

It was not until April last that I had an opportunity of testing its action, when I was sent for to see Mr. W——, aged 74 years. I found him literally covered with variolus eruptions in the vesicular stage, and commencing to umbilicate. He had up to this time ordinary good health, but was somewhat enfeebled by age.

To prevent injury through fear, it was thought best to conceal from him his true condition, and he was led to believe he was suffering from *nettle-rash*, and was not aware of the reality until well, so that on one occasion of my visit he said to me: "Doctor, I think I once had a horse that had the same disease I have," and then went on to describe the condition of the animal. I need not say we were amused. I immediately commenced the giving of salicylic acid in doses of ten grains. It was given regularly every three hours, day and night, in a liquid form combined with mucilage.

On the third day of its administration the pustules began to abort, their contents absorbed gradually, leaving a *pale, thin scab*, or scale, much resembling a minute fish-scale. These scales separated so rapidly that large quantities were removed each morning when changing the bed linen.

In two weeks the patient was convalescent, after which the remedy was continued one week longer in same dose three times a day. He is now as well as before the attack. The result has been most satisfactory. That loathsome disease is robbed of its horrors by this remedy. No pitting,

no disfigurement. I would earnestly call the attention of my professional brethren to its use. It is true, I have but the one case to offer; but had I a thousand more to treat, I would use it in all.

HOSPITAL REPORTS.

A CLINICAL LECTURE AT CHARITY HOSPITAL, CLEVELAND.

BY REUBEN A. VANCE, M. D.,
Of Cleveland, Ohio.

Professor of Operative Surgery and Clinical Surgery in the Medical Department of the University of Wooster; Consulting Surgeon to Charity Hospital, etc.

Tumors of the Breast: The Removal of Benign Growths From Young Women Without Mutilation of the Mammary Gland.

Those of you who have attended my clinics this session are well aware that there are certain tumors of the breast for the relief of which excision of the mammary gland was advised. In the patient from whom this growth was removed excision was not practiced—on the contrary the tumor was extracted, and not only was the mammary gland preserved intact, but the breast escaped mutilation and its integumentary coverings were not scarred. In this particular instance—and it is but one of a numerous class of cases—there was something which justified a very different procedure from that usually adopted in this amphitheater: in what does the difference consist? Review the question of age; you will know that prior to the twenty-fifth year cancer of the breast is almost unknown—that after the forty-fifth year it is very common. On the other hand, the tumors of the breast found in women under twenty-five are either fibromatous or sarcomatous, in the proportion of seven fibroids to one sarcomatous growth. Here, then, is one excellent reason: tumors of the breast in old women are commonly cancerous, those of young women are constantly non-cancerous; the former demand complete removal of the diseased breast, the latter require enucleation of the morbid mass. Second, consider the condition of the patient: in old women the implicated organ has played its part in life and is now entirely functionless; in the young woman the organ has just developed or is just developing, and all its duties are yet to be performed; the tumor in its substance is innocent in character, and can be extracted without injury to the secreting structures of the mammary gland. A third consideration is symmetry of form and bodily looks. To the young woman this is a matter of great importance: to the old woman it is a secondary consideration. The period of life at which a tumor is removed, the nature of the organ from which it is taken, and the influence of the operation upon the appearance of the patient, are not the only circumstances to be taken into consideration in these cases; the behavior of the organ in which the growth is situated, and the influence its developmental, functional or atrophic changes exert over the tumors its textures may give lodgment to, are also matters of moment. When the peculiar character of the mammary

glands is reviewed and their life-course traced, several reasons present themselves why the innocent tumors of these organs in young women should receive different treatment from that accorded the cancerous growths of old women. Without entering into these numerous additional reasons, it will suffice to say that the stimulus of menstruation, of pregnancy, and of lactation, so frequently augments the rapidity of growth and changes the character of benign tumors of the mammary gland, converting them into malignant growths, that it is the imperative duty of the surgeon to remove them at the earliest moment possible. In doing so, however, it is incumbent upon him to operate in such manner as to make sure of excising all the tumor without destroying the gland—the new growth must be taken out, but the symmetry of the patient's form must be preserved. Can this be done? The history of this patient will convince you not only that these new growths can be completely eradicated without injury to the mammary gland, but that tumors of even quite large dimensions can be taken out of that organ without the breast being mutilated or its surface scarred.

The patient, an unmarried lady in her twenty-first year, hurt her left breast during the holiday season of 1879; the elbow of a young lady friend accidentally came into violent contact with her person, striking just on the nipple. Sharp stinging pain followed the blow, but she noticed no immediate swelling, and as all pain subsided in a day or two, she would have thought nothing more of the matter had not a feeling of soreness led her to examine the organ just as her monthly period was commencing, ten days subsequently. She then discovered a lump, the size of an almond, deep in the gland. This alarmed her no little, and as the pain recurred every night after retiring (but was absent during the day) she became nervous and despondent. Having lost her mother some years since, the young lady had no one to whom she felt like going for advice; and while she was brooding over the matter, the pain disappeared and her attention was drawn to something else. With the advent of her next menstrual epoch, the distress was renewed. For the whole year—1880—she suffered in this intermittent way, but at the end of that time she discovered that the tumor was gradually enlarging. During the year 1881 each recurrence of her menses was attended by a decided augmentation in bulk of the mammary growth. The uneasiness and pain still returned at such times, but no distress was experienced in the intervals. About a year ago the gland became so distorted that she was compelled to adopt various devices to conceal the deformity. At this time a lady relative told the patient's father the true state of affairs, and he took her to Cincinnati for professional advice. I then saw her for the first time, and found a globular, firm growth near the centre and posterior part of the left mammary gland. The tumor seemed about the size of a large hen's egg. I urged immediate excision.

I saw nothing more of this patient until the first week in June, 1882. She then presented quite a matronly aspect, and her face bore evidence of the anxiety she had been enduring. Upon examination, the left breast exceeded the

right four inches in circumference; the gland projected abruptly forward, and its integument was tense and shining from distension. The young lady told a pitiful tale of mental agony and broken rest, and the great struggle she had gone through before she could make up her mind to have the tumor excised. Her father had used every inducement to have her consent to the removal of the tumor, but it was only a few days prior to the operation that she reluctantly yielded.

At the time she came under my care in June, I prescribed a mercurial cathartic, and after her bowels had been thoroughly emptied, she was confined to her room the two days preceding the operation for the excision of the mammary tumor. As you will see, ultimately there was nothing in the case to render it worthy of record except the principle upon which the operation was based, and the mechanical details of the surgical measures adopted. There can be little doubt but that all neoplasia of the breasts in young women demand excision so soon as they commence enlarging, or become the site of constant pain: there can be as little question but that, in removing these tumors, it is the surgeon's duty to disfigure these organs as little as possible. The history of this patient is an additional argument for early excision, and the operation performed an illustration of the fact that quite large tumors may be removed from the mammary glands of young unmarried women without the production of obvious scars or perceptible deformity.

Since the winter of 1869 I have been in the habit of making my incisions for the removal of non-malignant growths of the female breast in the fold caused by the fall of the organ upon the wall of the thorax. By this procedure I have excised good-sized tumors of the mammary gland in young women without marring their figures or scarring their chests.

Dr. T. Gaillard Thomas, in a recent article in the *New York Medical Journal and Obstetrical Review*, has systematized this procedure, and given the profession an original and valuable method of treating a certain class of tumors of the breast. He says his method is not adapted for malignant growths nor very large benign tumors. He has found it valuable in fibromata, lipomata, and adenomata, varying in size from a hen's egg to a duck's egg. He operates as follows: "The patient standing erect, and the mamma being completely exposed, a semi-circular line is drawn with pen and ink, exactly in the fold which is created by the fall of the organ upon the thorax. This line encircles the lower half of the breast at its junction with the trunk. As soon as it has dried, the patient is anesthetized, and with the bistoury the skin and areolar tissue are cut through, the knife exactly following the ink line until the thoracic muscles are reached. From these the mamma is now dissected away until the line of dissection represents the chord of an arc extending from extremity to extremity of the semi-circular incision. The lower half of the mamma which is now dissected off is, after ligation of all bleeding vessels, turned upward by an assistant, and laid upon the chest walls, just below the clavicle. An incision is then made upon the tumor from underneath the bistoury, a pair of short volsella forceps is firmly fixed into it, and

while traction is made, its connections are snipped with scissors, the body of the tumor being closely adhered to in this process, and the growth removed. All hemorrhage is then checked, and the breast put back in its original position. Its outer or cutaneous surface is entirely uninjured, and the only alteration consists in a cavity at the former situation of the tumor." This cavity is drained by means of a glass tube, the edges of the wound approximated with care, and the line of incision covered with gutta-percha and collodion. The ordinary antiseptic dressings are next applied. The stitches are removed on the ninth day; the tube is also taken out at this time; and in cases where these details were accurately attended to, no offensive discharge is encountered, and the patient's temperature never exceeds 100° F.

The operation was substantially that set forth above by Dr. Thomas. In minor points there was some deviation, yet in principle it was the same. In order that there might be as little deformity as possible, the line of incision was distinctly outlined with nitrate of silver, and on each side, above and below, opposite points were marked, through which subsequently stitches were passed. Experience having shown that a disagreeable and persistent thickening is apt to develop at the place occupied by the glass tube, the necessity for the latter was obviated by employing a large number of stitches and then obliterating the cavity within the gland by compressing the breast with a carefully applied flannel bandage. It was thought that some arrangement would have to be made for drainage of the cavity in the breast: since the tube was abandoned and the gland compressed, there has been no demand for drainage materials of any kind. Should the mamma become distended, a probe can be introduced at a dependent point and the fluid discharged. In my last five cases treated with compression and without drainage-pipe, the cavity in the breast united by first intention as readily as the wound in the integument.

Ten months have elapsed since this young lady was before you. The change in her general appearance is as marked as the modification in outline of affected gland is distinct. She has once more become herself in every way, and presents herself here, not that she needs surgical aid, but that you may see how time has treated the organ then operated on. A thin white line marks the cutaneous incision; please note that as she stands erect you can notice no difference between the mammary glands of the two sides. She revisits us in company with a friend who requires an operation. It is a pleasure to meet with patients who appreciate what has been done for them. In this instance the young lady was not a clinical case, yet she voluntarily comes before you that you may see the result of an operation that to her was of such vital moment. After glancing at this result, I am sure you will hesitate long before performing any of the operations this procedure is designed to supersede—operations, the disfiguring character of which had much to do with preventing patients accepting the undoubted benefits they offered, and indirectly caused many women ultimately to suffer death from mammary cancers who should have escaped that fate. This pro-

cedure of Thomas will not only remove deformity and alleviate distress, but, by inviting early excision of lesions of the breast, will certainly tend to materially diminish that form of cancerous disease of the mammary gland in which carcinoma supervenes on long-standing benign growths of that organ.

MEDICAL SOCIETIES.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

Stated meeting, Thursday, May 3, 1883.

The President, R. A. Cleemann, M. D., in the chair.

Dr. Wm. Goodell related the history of

Three Stubborn Cases of Vesico-Vaginal Fistulae Successfully Treated After the Operation Without the Use of the Catheter.

The first one, after a non-instrumental labor lasting from a Tuesday evening, when the membranes broke, to a Friday night, found that her urine dribbled away immediately after the birth of the child. The fistula was situated so close to the cervix as to implicate it, and was quite large. Sixteen months after the accident she was operated on by a distinguished surgeon, whose success in uro-genital fistulae is very great. He turned the cervix into the bladder, and successfully closed up all the rent save a small portion of it. On this fistula he operated three times without any union whatever. In each instance the urine dribbled away before the stitches were removed, and on two occasions an alarming hemorrhage came *per vaginam*. This information Dr. Goodell obtained from the surgeon himself.

Early in 1877, Dr. Goodell operated on her at the Hospital of the University of Pennsylvania and put in Sims's self-retaining catheter. Eight sutures were needed to close the opening. The next day a hemorrhage from the bladder, possibly menstrual, took place and lasted several days. A fever also set in which gave some alarm. When the stitches were removed very little union was found to have taken place. Four months later Dr. Goodell operated for the second time, and thinking that the vesical hemorrhage in the preceding operation was caused by the irritation of the self-retaining catheter, he treated her without one. The first twenty-four hours her urine was drawn off every four hours, but afterwards she was allowed to pass it herself. No hemorrhage occurred, and perfect union took place.

The second case was also one of tedious labor in which the forceps were not used. The fistula at first was a very large one, and was most skillfully closed by an excellent surgeon. A very small fistula, however, remained at each angle of the wound. These defied repeated operations on his part, and the case finally drifted into Dr. Goodell's hands. Twice the latter operated at his private hospital on these fistulae, using the Goodman self-retaining catheter, but each time vesical and uterine tenesmus set in and the result was a failure. Both fistulae were then burned with the actual cautery and one of them closed up, but the larger one resisted this treatment as well as that by nitric acid. He then operated upon it a month

ago for the third time, dispensing with the use of the catheter. The lady was instructed to pass her water before the desire was urgent. Neither vesical nor uterine tenesmus occurred. The stitches were left in for fourteen days and union was complete.

The third case was the result of a short labor and the cause of the fistula is obscure, as the lady was attended by a midwife, who pulled and tugged away at something after the birth of the child. The late Dr. H. Lenox Hodge had operated five times upon it, closing all but a small fistula which lay at the junction of the neck of the bladder with the urethra. Dr. Goodell closed this fistula at the Hospital of the University three weeks ago with eight stitches, and fearing that the catheter would interfere with union, dispensed wholly with it. The success was complete.

From these cases and from others which he had met with, Dr. Goodell was led to think that the catheter might as a source of irritation often be dispensed with very advantageously in the treatment of these fistulae. He cited the practice of the late Dr. Simon, of Heidelberg, who was a very successful operator, and yet rarely resorted to its use. He also called attention to the fact that in these cases, and in the very great majority of the cases he had met with, the forceps had not been resorted to, showing that it was not the use of that instrument, but its neglect or the delay in its use, that caused the mischief. In fact, he could not recall a case in which the lesion could be attributed to instrumental delivery. In the general experience of surgeons, very small vesico-vaginal fistulae were harder to cure than moderate-sized ones. One reason for this is attributable to the fact that they usually are found in sites difficult to reach; and another that the operator is unwilling to enlarge the small opening by bold incisions, and fails from too small a denuded surface. Including the one previously referred to, he had closed two of them by means of the actual cautery.

Dr. Albert H. Smith remarked that these cases were of great interest. He had been taken by surprise when Dr. Simon announced his plan of treatment without the catheter, as he had been afraid of the strain on the stitches resulting from the accumulation of urine in the bladder. The presence of the self-retaining catheter must necessarily be a source of irritation and vesical tenesmus. The small holes in its bulb may become occluded by mucus or clot, and then it would act as a plug instead of a drain. In those cases in which the loss of substance in the vesico-vaginal septum has been very great, and the mucous surface of the bladder has been prolapsed into the vagina, the capacity of the bladder becomes small, and it must be emptied frequently or the tension on the stitches becomes too great.

He had been gradually led to the conclusion that it would be better not to use the catheter after trachelorrhaphy and perineorrhaphy, unless called for by special circumstances. There are cases in which, in consequence of mental influence or the effect of position, the patient cannot pass her water for weeks after labor in which no injury or long or undue pressure has occurred.

Dr. R. P. Harris had recently operated for the restoration of a very long perineum. The last

stitch was almost on a line with the orifice of the urethra, and the nurse was not able to introduce the catheter. He placed the patient in a sitting position to pass her water, and used a male catheter, tied on the tube of a Davidson syringe, to wash out the vagina.

Dr. Goodell is by no means a convert to treatment in this class of cases without the employment of the catheter. He has been too successful with it. He prefers the Goodman self-retaining instrument, but he makes certain that it does not impinge on the wound. He has realized the influence of mind and of position on the ability to pass water, and he thinks the use of ergot, so general before the third stage of labor, is one cause of the difficulty, as it is quite possible that it may cause a spasm of the urethral constricting fibres. He would like to dispense with the use of both catheter and syringe after perineorrhaphy, as he has found injuries to the anterior angle of the wound, by the syringe and the fingers of the nurse while introducing the catheter. He has been in the habit of putting one stitch through the sound skin above the denuded surfaces to prevent this injury. In one case recently the Goodman catheter slipped out twenty-four hours after perineorrhaphy, and he did not replace it, the wound healing. He always uses the catheter after trachelorrhaphy.

Dr. W. Goodell also exhibited

Two Ovarian Tumors, one of them of Doubtful Character.

The one of doubtful character was removed from an unmarried woman, aged 27, who had not menstruated for over a year. It was first discovered nine years ago, but gave no trouble until two and a half years ago, when ascites set in. She had been tapped fourteen times when Dr. G. first saw her. She was very thin, pale, and so weak as to keep her bed. He recognized a hard tumor floating in the ascitic fluid, giving the feeling of ballottement, and diagnosed it either as a solid ovarian tumor or a pedunculated fibroid.

On the 18th of last April he removed it at the University Hospital, and found it to be a hard, solid nodular tumor of the right ovary, with evidences of papillomatous degeneration. It had merely omental adhesions, and had a long slender pedicle twisted many times on its axis. It was evident that the ascitic fluid was secreted directly from the tumor, and did not come from pressure on abdominal veins or from irritation of the peritoneum.

The other cyst was removed also at the Hospital of the University, and on the same day, from a married woman, aged 26, who noticed it two months after her marriage and about four months ago. The cyst was as large as the adult head, and was apparently attached to the womb, which was drawn upwards and gave a measurement of four inches. It was operated on early because it caused great vesical disturbance. The lower portion of the cyst was found enveloped in the broad ligament close up to the womb and had to be enucleated. It was this condition that gave the symptoms of uterine attachment. The cyst was that of the left ovary, but as the right ovary also presented tokens of degeneration it was also removed. Both women recovered promptly, although the first one had on the third day a severe

attack of mumps, which appears to be prevailing in this city as an epidemic. The ascitic fluid, which was straw-colored and syrupy, was not examined microscopically.

Dr. M. O'Hara wished to know how Dr. Goodell could decide quickly between mumps and septic parotitis. He also spoke of the reflex action of the sexual organs as shown by the frequent occurrence of salivation during pregnancy. In a recent case of cancer of the rectum, the first symptom observed was excessive secretion of saliva.

Dr. Albert H. Smith remarked that mumps was a very interesting and very perplexing disease. He has seen cases of extension of the disease without retrocession, in adult women, to mastitis and ovaritis—the swelling of the parotid gland being rapidly followed by the involvement of the sexual glands, the inflammation of the ovaries being accompanied by local peritonitis. A singular question was raised by the case of a young man who went to Florida directly after marriage, and on the return trip by sea experienced a severe attack of mumps; it was complicated by orchitis, the inflammation being of high grade with great increase of temperature and rapid pulse. No atrophy of the testicle has occurred, but the union has been sterile, and there is no known fault on the part of the wife. The semen has not been examined microscopically to ascertain the presence of spermatozooids. The mastitis accompanying mumps has never, in Dr. Smith's experience, run into suppuration, but is accompanied by febrile action of a high grade. He has seen the ovary, the original point of attack, the inflammation of the mammary gland being later. It is a marvel of pathology that this disease, which affects in childhood the salivary glands only, should in adult life affect the sexual glands also. He has never seen a case of atrophy of the testicles following mumps.

Dr. Goodell recognized mumps in this case by his experience in two previous cases of mumps with severe symptoms in adults. The pulse does not become so frequent, as in septicæmia, and the eye remains clear and does not acquire that glassy appearance so indicative of a fatal issue. Dr. Goodell has never seen the involvement of the breast and ovary. A peculiar relation between the sexual organs and the glands of the neck is shown by a habit of the Roman matron who measured the throat of her daughter before and after the night after marriage, to ascertain if the young husband had properly performed his marital duties, and if they had been properly received.

Dr. Albert H. Smith exhibited a set of hard rubber

Urethral Dilators.

The set consists of ten pieces, with two handles into which they can be screwed; the smallest bougie is twenty millimetres in circumference at the point, and twenty-eight millimetres at the largest part, the tapering in each bougie being eight millimetres, and a difference of six millimetres between each one and the largest circumference of the next in the scale. The largest one is eighty-two millimetres at the largest part and would be useful as a rectal dilator. He had been very much surprised at a statement made by Dr. Emmet at the last meeting of the Gynecological

Society in Boston, that dilatation of the urethra almost universally causes laceration, and is followed by permanent incontinence of urine. Dr. Smith has been in the habit of doing it frequently and fearlessly, without hesitation, not only in diseases of the urethra and bladder, but for exploratory purposes and for the removal of stone as a step in the operation of anterior elytrorraphy; but also that by means of a finger in the bladder he may judge of the thickness of the walls in denuding the vaginal surface, and place his sutures satisfactorily. He has never had incontinence of urine to last over twenty-four hours from this procedure.

Dr. R. P. Harris had seen a large number of dilatations of the urethra without any bad effect. He would consider the method of Dr. Smith is better than any other plan, as it would make a perfectly even and uniform pressure on every portion of the urethra, with a very gradual action, free from the dangers incident to the opening of any form of instrument with blades.

Dr. Goodell was much obliged to Dr. Smith for exhibiting these instruments, and would get a set of them. He has entirely dropped Simon's dilators, and has for some time been using his little finger as the best dilator. He has not had any trouble from laceration or incontinence. In one case in which he resorted to dilatation and treatment to the mucous surface of the bladder as a cure for cystitis following labor, incontinence remained for a long time, but gradually disappeared. He knew of laceration and incontinence in two instances resulting from the use of the thumb as a dilator. Dilatation alone is a good treatment for many cases of irritable bladder.

Dr. Wm. H. Parish narrated the case of a widow operated on by Dr. Goodell by dilatation, for the relief of a very aggravated case of irritable bladder, the result of a gonorrhoea contracted years before from her husband, and which had been followed by cystitis. It was greatly relieved for several months, but not cured by dilatation, but the relief was only temporary. The patient passed under the care of Dr. H. Lenox Hodge, who cauterized the urethra by means of Paquelin's cautery. In consequence of the illness and death of Dr. Hodge, she came again under the care of Dr. Parish, who commenced treatment by the injection of a solution of nitrate of silver, very strong at first but weaker on subsequent applications. The trouble has passed entirely away. There are two causes of fissure in dilatation; the first is too rapid expansion of the dilator; the second, changes in the mucous membrane, as from inflammatory action, particularly if caused by gonorrhoeal poison.

Dr. Chas. H. Thomas had lately procured a set of nickel-steel instruments of about the same taper and for the same purpose as those exhibited by Dr. Smith. The set consisted of sixteen pieces. They were one-and-a-half mm. as the scale, and each dilator tapered five mm. from the point to the largest circumference of the shank; they ranged from twenty-five to fifty mm. He has tried in some cases using every second instrument, making rises of three mm., but has found that the pain was increased by so doing. He has never known of a case of incontinence caused by dilata-

tion, but has heard of such from the hands of two celebrated surgeons of this city. He thinks dilatation to the size of the finger a good treatment for the relief of irritable bladder in connection with irritation of the urethra and neck of the bladder. He related the history of two cases in which this condition was complicated, and made persistent by sphincterismus of the sphincter-ani muscle; dilatation of the urethra in these cases, although a benefit, did not cure the trouble, but when to this was added dilatation of the sphincter-ani, so that two fingers could be introduced back to back, and a good dilatation secured, the cases were permanently cured.

Dr. B. F. Baer has practiced dilatation of the female urethra a number of times, and has had no instance of continued incontinence. He would, however, question the propriety of ever using a large-size dilator, except for the purpose of removing a calculus from the bladder, and even in that case he thought it might be better to allow the stone in the grasp of the forceps to finish the dilatation, than to use mechanical dilators to secure the full extent needed. In one instance incontinence lasted several weeks after dilatation, but final recovery was complete. Solutions of carbolic acid having been applied in the meantime for the cure of an irritability of the bladder and urethra.

Dr. Parish would like to hear from Dr. Smith respecting the indications for probable success in treatment by dilatation of the urethra for the relief of irritation of the bladder.

Dr. Smith in reply to Dr. Baer remarked that no cavity of the body should ever be dilated beyond the actual necessities of the case; such a principle is unquestionable; but no form of dilator could be worse than the irregularities and roughness of a calculus, increased in size, as it would be by the grasping forceps, which would present but two points of contact with the urethra, and render laceration quite probable. In a patient recently under his care he had reason to suspect the existence of papillomatous growths on the mucous surface of the bladder; he dilated the urethra, using the largest size of Simon's dilators and, completing with a Molesworth dilator expanded very slowly. He was able to evert the bladder through the urethra, and removed the vegetations by means of scissors. There was no laceration nor incontinence resulting from this procedure. The danger is in too great haste.

In reply to Dr. Parish, he said that dilatation is usually resorted to for exploratory purposes, removal of stone growths on the vesical wall, or to ascertain the thickness of the wall of the bladder, and to introduce a finger into that viscus to guide the sutures in plastic operations upon the vagina. Irritability of the neck of the bladder can generally be relieved by dilatation, but it sometimes fails to cure.

Dr. Smith prefers hard rubber to plated metal as the material for the dilators; it is lighter in weight, is not liable to corrosion, and is more easily kept clean. He thinks the multiplicity of instruments in Dr. Thomas' scale a disadvantage, and that time is lost and irritation caused by introducing several instruments, in place of allowing one to remain a longer interval.

EDITORIAL DEPARTMENT.

PERISCOPE.

Dyspepsia—Ulcer of the Stomach.

Dr. Donald W. Hood read a practical paper on this subject before the West London Medico-Chirurgical Society, *Medical Press*, March 7, 1883.

In this paper the author maintained that the more our experience of the natural history of disease increased, the more we must accustom ourselves to the fact that dyspepsia should be looked upon as symptomatic rather than generic. He drew especial attention to those cases of stomach lesion in which dyspepsia plays such an important part as a symptom, and suggested that in many cases of so-called simple dyspepsia there was a definite lesion of stomach coat. He held that the carefully compiled category of symptoms incidental to ulceration of the stomach suggests that its diagnosis is easy, the very opposite of that being clinically the case. In the early part of 1879 he had placed under his charge, by Sir William Gull, a gentleman, *et. 40*, who had spent many years of his life in the colonies, where he had sheep-tracks. For eight years he had been a sufferer from dyspepsia, the commencement of which he attributed to irregularities of diet. He first felt pain over the region of the stomach; soon he suffered from attacks of vomiting, and acid water-brash. Failing to obtain relief, he came to England. When first seen by him, eighteen months after his arrival, his symptoms were much intensified. He detected blood in his vomit. Presently the stomach became intensely irritable, the patient being supported entirely by means of nutrient enemata. Slowly the grave symptoms subsided, and he regained flesh. In six weeks he went about as usual. But three weeks afterwards, while sitting, on moving suddenly, he felt a pain in the stomach, and died within twelve hours. The *post mortem* showed perforation of the stomach at its anterior base. A small healed ulcer, at its base no thicker than tissue paper, had given way, and the contents of the stomach had become extravasated into the peritoneal cavity. The most instructive part of the examination was the condition of the stomach in the immediate vicinity of the pyloric orifice, which was honey-combed with the remains of cicatrices of old ulcers that presented small depressions corresponding to the position of gastric follicles, which are in greatest abundance at the pyloric extremity. The condition of the mucous membrane appeared to supply abundant cause for all the gastric trouble which had caused so much pain during the preceding eight years. It happened that another patient, whose symptoms bore some resemblance to those of the case he had stated, was under his care at the same time. This was a German gentleman, *et. 40*, who had suffered from painful digestion about fourteen years. In the early days of his illness he had felt pain after taking food. Later, he began to suffer from occasional attacks of vomiting. He had been repeatedly treated for dyspep-

sia. When first seen he was rather emaciated. The stomach usually emptied itself at the end of the day. On several occasions a coffee-colored matter had been ejected, and altered blood was sometimes mixed with the vomit. The stomach descended below its natural limit, and a small lump could be felt in the epigastric region, indicating obstructive disease of the pylorus. Upon treatment, flesh was gained, the vomiting ceased, and the stomach recovered its natural size; but the lump remained. Subsequently, he went to his business abroad, when the symptoms returned, and he died of exhaustion. Statistics proved that ulceration of the stomach was of very frequent occurrence, but beyond question the symptoms of ulceration varied very greatly. Although hæmorrhage was a symptom of the utmost moment, it was not judicious to wait for the presence of blood before inferring the existence of ulceration. All writers on the stomach treated ulcer as a chronic disease, but none of them advised such treatment as would be adopted in regard to an ulcer occurring on the surface of the body. In treating assumed ulcer, he thought it imperative that the patient be kept in a recumbent position, in order that the stomach walls might be in a state of rest. When there was much enlargement of the stomach he generally used a counter irritant, and he freely prescribed the various preparations of opium in those cases where there was no doubt that the dyspepsia did not arise from hepatic engorgement, as he found that it not only stimulated the bowels, but also made the patient intolerant of restraint. Such treatment in the early stages of dyspepsia was sure to result well. Where the presence of ulceration was well marked, such treatment should be resorted to as would be insisted on if the ulcer occurred on the surface of the body. He had found this method of treatment productive of the best results in the case of a lady who, at the time of first seeing him, was afraid to take the simplest food lest its ingesta should cause her pain. On making a careful examination of the abdomen he failed to find enlargement, but in the epigastric region there was a spot most tender on pressure. He ordered her to bed, recommended rich milk and light broth as diet, and prescribed six drops of landanum every four hours. Iodine was suggested as a counter irritant. A simple soap-and-water enema was to be used every other day. From the first the patient's progress was satisfactory. Pain ceased, there was no vomiting, and the bowels acted regularly. She left her bed in fourteen days, and recently he received a letter stating that she was quite well. He regarded the case as representing ulceration or excoriation at that stage in which great good can be done by a decided course of treatment.

Lime Juice.

From the *Chemist and Druggist* we note that in a paper recently read before the Liverpool Chemists' Association, Mr. Michael Conroy F. C. S., gave an

interesting account of the production of Montserrat lime-juice, and a summary of his experiments on over 4,000 samples of this product.

Lime-juice is the expressed juice of the fruit of *Citrus limetta*, a member of the orange tribe (Aurantiaceae). The tree is a thorny, bushy evergreen, with handsome dark foliage of exquisite fragrance. The flowers are white, resembling orange blossoms, and their perfume is equally delicious. The tree flourishes best in a light sandy soil, near the sea, and comes into full bearing in about seven years after the seed is set. It grows wild in nearly all tropical countries, but is now largely cultivated in the island of Montserrat. The fruit is about one-half the size of a lemon, with a smoother and thinner rind, oval, rounded at the extremities, and of a pale-yellow or greenish-yellow color. The exterior of the rind possesses a fragrant odor, and a warm, aromatic, slightly bitter taste, somewhat similar to that of the lemon. The juice, when fresh and sound, is sharply acid, with a peculiarly refreshing and grateful flavor. In Montserrat the lime-fruit harvest is heaviest from September to January, but a good supply of fruit is yielded throughout the whole year. Here, where the lime tree is specially cultivated for the sake of the juice, the work is done in a systematic manner, with suitable machinery. The fruit, after collection, is taken to two central factories, where it is sliced by water-power, and then squeezed in huge wooden presses, the juice being run into puncheons and quickly bunged up. Choice fruit is alone used, and only about two-thirds of the juice is pressed out, thus ensuring greater freedom from mucilaginous and pulpy matter. The further pressings, together with the juice of the unsound fruit, are evaporated to the consistence of treacle, and sent over to this country for the manufacture of citric acid.

It is chiefly owing to these precautions that Montserrat lime-juice is so much superior to that produced in Jamaica and elsewhere, where no care or supervision is exercised in its preparation.

Lime-juice contains citric acid, gum, sugar, albumen, extractive matter, inorganic salts, and water. The most important constituent is the citric acid, but as to the percentage of citric acid contained in juice authorities disagree considerably. Mr. Conroy, however, by a record of the citricity of over 4,000 samples, which he has examined during the past few years, has fairly settled that question. Each sample examined has represented a puncheon of over 100 gallons, and has been taken from the puncheon on the quay, after landing. The citricity has been estimated by volumetric estimation with caustic soda solution. The free citric acid in the 4,160 samples varied from 6.7 to 10.05 per cent., representing 10.72 to 16.08 oz. per gallon. The average of the whole was 7.84 per cent., representing 12.54 oz. per gallon.

Mr. Conroy has found that samples of the lime-juice bottled and kept in the laboratory for twelve months, with no preservative added, and exposed to light, remained perfectly sweet and sound. One sample filtered, retained its full citricity, but another sample which had been filtered had lost .02 per cent. Mr. Conroy accounts for this difference by supposing that the essential oil emulsified by the mucilage and sugar of the juice in the unfiltered sample had helped to preserve it.

On the basis of this experiment Mr. Conroy concludes that for the purpose of supplying lime-juice for ships, the addition of spirit is not necessary. Spirit is necessary, however, for the preservation of lemon-juice, which contains much more sugar and mucilage. But the 15 per cent. of proof spirit, ordered by the Board of Trade, is insufficient and useless. At least 30 per cent., or, better still, its equivalent for a stronger spirit, is necessary.

In the Royal Navy only lime-juice is used, with the gratifying result that scurvy is now practically unknown. In the Merchant Marine Service, however, lemon-juice is chiefly used, owing to its cheapness, and here cases of scurvy are frequently occurring; not, Mr. Conroy thinks, that lemon-juice is inferior to lime-juice as an antiscorbutic, but simply that it soon becomes inert and useless by fermentation.

The Treatment of Phthisis by Iodoform.

The *Brit. Med. Jour.*, April 28, 1883, says that Dr. Dreschfeld has continued his observations since his first communication (*Brit. Med. Jour.*, 1882, vol. ii., p. 169). The favorable opinion then formed has been further strengthened by the results obtained. Of sixty-four cases of confirmed phthisis, more or less advanced, and concerning to a great extent out-patients at the Manchester Infirmary thirty-four cases only had been under treatment sufficiently long to be available for the purposes of this communication. Of these thirty-four cases, four were in so far advanced a condition that the iodoform was only borne in the form of inhalation, but gave no results; two cases were complicated with amyloid disease, and here also the iodoform was useless. Of the remaining twenty-eight cases, ten showed either no improvement or only a temporary improvement (increase of weight, improvement of appetite, decrease of cough and expectoration); while the physical symptoms showed no alteration at first, but afterwards the phthisical process gradually advanced and associated again with loss of flesh, night-sweats, etc. Of the remaining eighteen cases, some showed slight but steady improvement, broken only temporarily by a fresh cold or some complication, such as gastric catarrh, pleurisy, etc.; whilst in six cases the improvement was most marked and beyond all expectation, the increase in weight amounting in one case to fourteen pounds, in another to ten pounds, and in a third to eight pounds, in one month. The physical symptoms also improved; the sputa, however, continued to contain tubercle-bacilli. The iodoform treatment was also tried in six cases of incipient phthisis. Of these, two had only been under treatment for a very short time. Of the four remaining cases, two showed no improvement; one was at once benefited; cough and expectoration entirely ceased; the apex-catarrh disappeared; and the patient felt now perfectly well.

In the second case (reported in the *British Medical Journal*, February 17, under A. S.), the treatment was equally successful—only, however, after having been continued for a longer time. There being an almost entire cessation of cough, it was difficult to obtain any sputa; one specimen, however, was obtained, and this was found free from

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bacilli, whilst before they were found abundantly. Two cases of laryngeal phthisis, treated both internally and by inhalation, and also locally by the application of iodoform-powder to the ulcers, gave satisfactory results; the ulcers cleared and became smaller, and the general condition improved. The iodoform was given in the form of pills (one grain of iodoform, two grains of croton-chloral, one minim of creasote), and in the form of inhalation (twenty grains of iodoform, twenty minims of oil of eucalyptus or ten minims of creasote, and half an ounce each of rectified spirit and of ether). The inhaler used was one devised by Dr. W. Roberts, consisting simply of horse-hair matting, to the inner side of which was attached some flannel or cotton-wool; and on this the inhalation-mixture was dropped. The cost of the inhaler was about threepence. Where the pills were badly borne (especially in women), the iodoform was added to cod-liver oil. In very young children, iodoform inunction, made with olive-oil or vaseline, was to be recommended; while older children seemed to take iodoform, either as powders or in small pills, very well. The good effects of iodoform seemed to consist in the following:

1. Increase of weight.
2. Increase of appetite.
3. Diminution of cough and expectoration.
4. Diminution or even total cessation of night-sweats.

5. The temperature was often a little lowered. No symptoms of iodoform intoxication had ever been seen. Several medical men, who had tried the iodoform treatment, had also obtained very satisfactory results.

The Diagnosis of Rotheln.

Dr. Edmond Shackleton thus writes to the *Brit. Med. Jour.*, April 21, 1883:

The diagnosis of rōtheln is of importance, as it is a trivial disease compared with those which it resembles. I have just had a case of it in a married woman over thirty, and I particularly noted the points by which it might be diagnosed on the first day of the eruption. My patient had complained of a sore-throat and soreness of some glands at the side of the neck for three days previous to the eruption. On April 9th, she found herself, on awakening, covered, on her body, upper extremities, face, and neck, with a red rash, the legs remaining unaffected till the third day. The case differed from one of scarlatina both in the appearance of the rash and in the general symptoms. The eruption consisted of spots like those of measles, and was particularly vivid on the face, so as to be conspicuous from a distance, which is not the case in scarlet fever. In spite of having some frontal headache and lumbar pain, she expressed herself as feeling quite well and bright; whereas, in scarlet fever at this stage, there is languor and prostration, and often nausea and vomiting. She had some shiverings, and loss of appetite, and thirst. Temperature 102.2°; pulse 100. In the evening, the temperature had fallen slightly, and next morning was 99.5°, and on the fourth day had reached the normal. From measles, it was distinguished by the absence of coryza, lachryma-

tion, etc., and cough. The spots are like those of measles, but are regularly distributed instead of appearing in patches. The skin felt tense, but there was no itchiness or sensation of burning. The chief diagnostic features of the disease appear to be that it presents the throat of scarlet fever with the eruption of measles, but without the coryza of the latter, and without the depression, rapid pulse, and high temperature of the former. My patient was sure that she had had scarlet fever and measles in her youth. No desquamation has followed.

Antiseptics in Phthisis.

Dr. Wm. Porter, Physician to Throat and Lung Department, St. Luke's Hospital, St. Louis, thus summarizes in the *Lancet and Clinic*:

Proven, it seems to me, are these two propositions:

1. Phthisis is a specific disease from a specific cause.

2. Phthisis may be produced by absorption of tuberculous matter in contact with the mucous membrane of the air-passages or intestinal tract.

There is also evidence that the energy of this tuberculous matter is due to germ development and progression.

Hence the value of antiseptic influence in the treatment of phthisis, not only in the later stages during pus-production and absorption, but also in the earlier process of infection.

One great demand is for that which, by local and internal use, may meet and destroy the septic agencies of disease. Such a remedy must be effective, unirritating and non-poisonous, susceptible of ready dilution and easy absorption, and withal inoffensive in odor and taste.

Carbolic acid and iodoform do not fully meet these requirements, and less harmful yet no less potent means of antagonizing contagion and putrefaction are finding favor.

The compound known as Listerine has, for nearly two years, served me better than any other remedy of its class, and, in the treatment of phthisis, has almost supplanted in my practice all other antiseptics. In treatment of diseases of the upper air-passages, it is pleasant and does not irritate; in the fermentative dyspepsia so often accompanying phthisis, it is safe and efficient.

It is the most powerful non-toxic antiseptic I have yet found.

The Value of Some Nitric, Nitrous, and Nitro-Compounds in Angina Pectoris.

With the view of determining whether it is the nitrous acid or its base that proves so beneficial in angina, Dr. Matthew Hay has instituted some investigations, which he publishes in the *Practitioner* for May, 1883; the following are his conclusions:

So far as at present known, the nitrogen-containing remedies for angina pectoris may be divided into two classes, the one consisting of combinations of nitrous acid with metallic oxides or alcoholic radicals, the other comprising a peculiar class of nitric ethers, obtained from the higher alcohols, whose decomposition within the body results in the production of nitrous acid. In both classes the action of the compound is ultimately

dependent on the nitrous acid present. Typical examples of the first class are nitrite of sodium and nitrite of ethyl, and, of the second class, nitro-glycerine. To these classes might be added another containing such substances as compounds of amyl, whose action is similar to that of nitrites. But, limited as this group at present is to compounds of amyl, it is not one to be chosen in the treatment of angina pectoris. The dose required is large, and the action is not rapidly produced, and disagreeable after-effects are apt to occur; and altogether I am very doubtful of its always acting so well as it did in one of my patients.

The Influence of Alcoholism on the Development of Skin Diseases.

Janin, *Th. de Paris*, 1881, says:

1. Alcohol is neither destroyed nor transformed within the organism, but remains there for a considerable length of time, and is eliminated, in great part, if not entirely, by the kidneys, the lungs, and the skin.

2. The bodily disturbances occasioned by this agent consist partly in intense congestion of the organs with which it is chiefly brought in contact, and partly in a profound alteration of the tissues and more important nutritive functions, which terminates in the development of genuine cachexia.

These disorders produce their most injurious effects on certain organs, particularly the skin, thus making it easy to explain the influence exerted by alcoholism upon the several varieties of cutaneous disease.

3. Alcoholism, by its unaided power, is capable of evoking morbid cutaneous phenomena, whose underlying cause, however, is to be sought for in some special constitutional predisposition, *i. e.*, in either the arthritic, herpetic, scrofulous, or syphilitic diathesis. But these effects are seldom met with; and what we most frequently observe, and should always bear in mind, in respect to this condition, is the important part it performs in the maintenance and aggravation of pre-existing disease, to which it sometimes imparts a very serious character.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT LITERATURE.

—“*Science*,” published weekly at Cambridge, Mass., is, so far as the general aim of its contents is concerned, an excellent journal. But it is very regrettable to notice the narrowed, prejudiced, and carping spirit in which it is edited. There are few good words in it for anybody outside of Boston, and those who write for it seem to aim to vindicate their ability by a studiously depreciatory reference to other workers. There is in it too much the style of the *New York Nation*, which is too omniscient to be truthful, and too feeble to correct its own errors. Such is not the spirit of true science, and should not be of any journal that bears that name.

BOOK NOTICES.

Transfusion—Its History, Indications, and Modes of Application. By Chas. Egerton Jennings, L. R. C. P., etc. Bailliere, Tindall & Cox, London, 1883. Cloth, 8vo., pp. 69.

The operation of transfusion has had periodical revivals, and here and there ardent advocates for centuries. Now and then, a wonderfully brilliant result is obtained by it; generally it is a disappointment. Dr. Jennings takes up the question of its utility in a strictly practical manner, and from personal observation of its effects. He has invented a siphon for intravenous injection and immediate transfusion, which he figures and describes. The operation he recommends is not, however, properly transfusion. He does not draw blood from another subject, nor, in fact, does he use blood at all, but a saline alcoholic fluid, which he believes acts almost as well, and which can be prepared any time at a moment's notice. This removes one of the greatest difficulties about transfusion, the securing a donor for the necessary blood.

An excellent bibliography of the subject closes the volume.

The Transactions of the American Medical Association.

Vol. XXXIII., Philadelphia, 1882, pp. 669.

In this, which we presume is the final annual volume of the American Medical Association, we have the usual minutes and formal matter, and a very fair number of essays. The most of these have already been communicated to the profession in various manners, so that there is little which is new to readers of medical periodicals. There is, however, an advantage in reading an author's views in full, and those who have had their interest excited by abstracts of the papers presented at the meeting will be glad to receive them in their perfect form in this volume.

Among so many well known writers, it were invidious to draw distinctions. Moreover, as matters now stand in medicine, hardly any one but a specialist can judge of specialists' papers. Hence, we shall not undertake to pronounce on the merits of the articles read before the different sections. There are few which are not by men well known for their thorough study of their respective branches. Of many we have had, or shall have, occasion to make extracts and notices in our columns.

Finally, we may say, the volume is one quite equal to any of its predecessors—and this is high praise.

THE
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THE
QUARTERLY COMPENDIUM
OF
MEDICAL SCIENCE.

With January 1st, 1883, the COMPENDIUM OF MEDICAL SCIENCE, formerly published half yearly, has been commenced as a *quarterly*, to be issued on the 1st of January, April, July, and October.

It is especially adapted to be taken with the REPORTER, as few or none of the articles in it appear in our weekly journal.

The price of subscription remains the same, \$2.50 per year. But as a special inducement to subscribers to the REPORTER to take the COMPENDIUM also, we offer the two journals at the very low price of

SIX DOLLARS,

when paid for *strictly in advance* and directly to this office.

MOTIONS OF THE INTESTINES.

Nothnagel has conducted a series of observations regarding the motions of the intestines, and published the results of the same in *Zeitsch. f. Klin. Mediz.*, iv., p. 532. The experiments were performed after the method of Sanders*; they confirm the opinion of Hongkerst,† that we never find anti-peristaltic motion in the normal uninjured intestine. If unirritating, indifferent fluids are injected into the bowels either in the form of clysmas or by puncture with an hypodermic syringe, no anti-peristaltic motion sets in, but such does happen when the solution containing 27–20 p. ct. of chloride of sodium, or a similar irritating fluid is introduced in any way into the alimentary canal. The anti-peristaltic motion may take place in the small as well as in the large bowel.

Were acute closures of the bowels artificially produced, no anti-peristaltic motion was noticed. Had the intestine been quiet before the sudden closure, then it also continued that way after the same; was the bowel before in motion, the latter also continued after the closure; but this depended greatly upon the contents, viz: If the bowels were empty, there was no motion; were feces contained in them, then the upper part, which they had left, was motionless, while the lower part, with its contents, continued the motion. This fact goes to prove that stercoraceous vomiting in cases of convolvulus or intussusception or any other closure of bowels, cannot be caused by the increased anti-peristaltic motion, and that Sweiten's theory regarding the pathology of this symptom is correct.

In catarrh of the intestines, if rapidly developed in consequence of some acute irritant, there develop themselves first strong contractions near the inflamed tissue; as soon as this part of the bowels is empty, these cease also. Nothnagel believes, however, that the increased irritability of the diseased bowel continues. He also noticed that in rabbits invagination would take place with ease and rapidity whenever the motions of the bowels have been increased very much; a fact

*Centribl. f. d. Med. Wissensch., 1881, p. 479.

†Ibidem, 1873, p. 471.

which would go to explain many a case of intussusception in men, where hitherto no cause could be detected.

We further learn from Nothnagel's observations, that the sulphate of sodium acts far more promptly on the intestines than the sulphate of magnesium, and that it is also far less irritating in character; the redness and local exudation following the application of the latter remedy being invariably more intense than the same symptoms caused by sulphate of sodium. It is a remarkable fact, that in our country and in England, Epsom salt is the remedy usually employed when the physician wishes to administer a saline cathartic, sulphate of sodium being left to the veterinary surgeons, who, on account of the cheapness of Glauber-salt use it in horses. But if all practicing physicians were aware of the fact, that while being far milder in its action, so mild that it can with safety be administered to the youngest child, half a teaspoonful of Glauber-salt will go as far regarding its cathartic effect, as about a tablespoonful of the far stronger, but usually-employed Epsom salt, and that besides, the latter has a more disagreeable taste than the former, there soon would be few physicians who would still use the Epsom salt; most would do what their German confrères have been for fifty years in the habit of doing, give preference to the milder, surer, and better-tasting Glauber-salt.

THE PATHOLOGY OF DIABETES.

All our acquaintance with diabetes, is, to say the least, very vague. Of its treatment, we are still quite ignorant, and in reference to its pathology, we are so much in the dark, that an English physician recently made the statement before the Pathological Society of London, that, in his opinion, diabetes has no pathology, that it is a functional disease.

The attention of this society has been lately devoted in an especial manner to this subject, and at a recent meeting (*Brit. Med. Journal.*, May 12, 1883), Dr. Pavy advanced some views that are so striking as to be well worthy of consideration.

He notes that glucose, cane-sugar and starch, are, in health, all converted by the ferments of the alimentary canal into maltose, which, in turn, is converted in the liver into starch.

It can be demonstrated by experiment, that when the liver is supplied with blood that contains an excess of oxygen, that is not thoroughly venous, a reverse action takes place and starch is converted into sugar.

Dr. Pavy supposes that owing to some lesion of the vaso-motor nervous system, the blood is allowed to circulate abnormally fast through certain areas of the organs which make the chyle, and that thus the portal blood, owing to the hurried circulation which takes place in certain parts, comes to contain too much oxygen.

A valuable coincidence was, that at the same meeting Dr. Dickinson said that he looked to a dilated condition of the blood-vessels in the organs as an important factor in the production of diabetes.

This theory is a very ingenious one, and seems to borrow additional weight from the rather numerous reported cases of diabetes in which ergot has proved beneficial; but does it go far enough?

It accounts for the sugar in the urine, and the hepatic derangement may account for the emaciation and loss of strength; but what accounts for the thirst and the large quantities of urine voided?

What we want is, first to determine whether this theory will stand, and then to inquire into the location and nature of the lesion of the vaso-motor system.

The London Pathological Society has appointed a committee to further investigate the matter.

ANGINA PECTORIS.

Angina pectoris being an affection which is so calculated to tax the equilibrium of a physician when called to a severe case, it is well to have constantly in mind the more important points concerning it. A very interesting lecture on the subject, by Professor Germain Sée, is published in the *N. Y. Med. Jour.*, May 26, 1883.

He considers that angina from tobacco is rare, and when it does occur, abstinence from the weed suffices to cure it; but, on the contrary, alcoholic angina does not yield to suppression of the cause since it is evidence that endarteritis of the coronary vessels as well as degenerations or sclerosis of the myocardium exists.

He states that the etiological treatment is unsatisfactory, and generally unsuccessful, and that the best we can do is to treat the paroxysms, and endeavor to prevent their return.

To meet the first indication, his sheet-anchors are morphia, hypodermically, and nitrite of amyl. He has used nitro-glycerine (one or two drops of a one per cent. solution) with success.

In the intervals of the attacks, he relies upon bromide of potassium if the patient is excitable, and digitalis when the angina results from cardiac atony or degeneration.

SELF-LIMITATION OF CERTAIN DISEASES WHICH ORDINARILY PROVE FATAL.

Drs. T. Gaillard Thomas, B. W. McCready, and A. C. Post had considerable to say on this subject before a recent meeting of the New York Medical and Surgical Society.

They regaled the members with interesting histories of cancers and consumptions in which they had made the gloomiest prognostications, and the patients recovered.

It seems strange that these distinguished gentlemen should deem it worth while to consume the time of the Society in reminding us that *prognosis* is not quite yet an *exact* science.

We have but little fear of honest contradiction, when we say that were every physician to make a memorandum of his prognosis in every case and compare it with final results, we would find ourselves mistaken as often as we would be correct.

We do not mean to belittle the value of prognosis, but we do think that our prognostic signposts are very far from accurate.

THE UTILIZATION OF SEWAGE.

Now that they have succeeded in converting the Thames into a sewer, the people of London are

commencing to think "what they are going to do about it."

Sir Joseph Bazalgate has suggested that works should be undertaken for emptying the sewage of London into the German Ocean, at a cost of \$30,000,000.

This proposition has been very wisely rejected and it is now under consideration to devise some means of converting the sewage of London into manure.

It is estimated that the annual output would realize 650,000 tons of excellent manure, which would materially reduce the expense of inaugurating such a system.

This plan is now in successful operation in portions of France.

It would be well for our cities and towns that are not satisfied (and very few of them ought or have any right to be) with their present method of disposing of sewage, to seriously consider this matter.

PNEUMATIC DRAINAGE.

In our issue of October 14, 1882, we made mention of the pneumatic system of drainage, which was being tried in a quarter of Paris.

It consists in the removal, by suction, of the refuse to a safe distance from the city, where it is converted into manure.

We have now the pleasure of reporting that it has led to such remarkable results in the decline of typhoid fever that it is to be extended to other quarters of the city.

NOTES AND COMMENTS.

A Case of Cystocele Complicating Labor.

Dr. John H. Whitham, L. R. C. P. Ed. of Harworth writes, in the *Brit. Med. Jour.*, May 5, 1883:

On January 10th, a patient of mine, who was pregnant, complained to me that she had "bearing-down pains" in the lower part of her body, and that she thought something had given way. I made a digital examination, and found a tumor protruding through the vulva. I could pass my finger behind it, and could recognize the os uteri high up and looking backwards; but anteriorly the tumor was attached. I concluded that it was

a case of cystocele, and ordered my patient to preserve the recumbent posture, making frequent use of the catheter myself, to prevent accumulation and decomposition of urine. The case went on without any inflammatory symptoms until labor set in on the 29th ultimo. Early in the labor the bladder and rectum were emptied. As the patient had a very roomy pelvis, I found that at first I could replace the tumor and hold it up above the pubes by means of two fingers; but as the pains became more intense, I was obliged to withdraw my fingers, and, in doing so, the bladder followed them. I then consulted with Dr. Dobie, of Keighley, and the result was that I gave the patient a full dose of ergot, placed her in the knee-elbow position, replaced the tumor, and held it in position until the next pain brought down the head well into the pelvis. After this, there was no further trouble; the case was quickly and easily terminated without further complication.

I have reported this case, not because any extraordinary treatment is adopted, but because I had to deal with a complication which is apparently rare, since I have fruitlessly consulted on this point several well-known midwifery books.

Imperforate Hymen Persistent in Labor.

Mr. H. Grey Edwards, B. A., M. B., B. Ch., of Bangor, writes as follows in the *Brit. Med. Jour.*, May 5, 1883:

At 11 p. m., April 25, 1883, I was called to see S. O., primipara, aged 32, said to have been in labor since Monday morning, the 23d ultimo. I found the patient suffering from severe "pains." On digital examination, I was somewhat surprised to find that the orifice of the vagina was completely closed by a tough membrane. Anteriorly, it was comparatively thin, and attached to the edge of the vaginal orifice, whence it sloped gradually backwards, until, at the posterior wall, it was attached an inch and a half from the orifice. Here it was very thick, and gave the same sensation to the finger as the walls of the vagina itself. The foetal head could be easily felt through the tissue, which was perfectly lax, resisting all efforts at rupture with my finger.

Having decided to give the uterus time to do its best, I left, calling again at 4 a. m.; but, though the pains had been strong and frequent, things were much in the same condition. By sawing with my nail at the thinnest part, I eventually got the end of my finger in, and tore the hymen by drawing the finger backwards, until about halfway across, but I could not manage it further.

I then waited an hour, in the hope that the remaining half would not be sufficient obstruction to delivery; but, "pains" becoming short and slight, I put on a forceps, and delivered without difficulty. The patient is going on satisfactorily.

I have reported this case under the belief that such a tough condition of hymen is most unusual.

It is medico-legally interesting, that one single act of copulation, in spite of the seeming difficulties of the case, sufficed for impregnation.

Salicin in Rheumatism.

Salicin is the natural product of the willow root, while salicylic acid is the artificial phenol derivative. Dr. Quinlan says that while the latter will sometimes sicken even in moderate doses, almost any quantity of the former can be given, and in the *Lancet*, May 5, 1883, he records two cases of acute rheumatism rapidly cured by its use. He advises it in large and frequently-repeated doses. One of his cases took eighty grains in one dose, daily, for three days without any bad effect. Salicin in very large doses is most easily taken by stirring it into a hock glass of milk, which the patient rapidly swallows before it has time to settle down from its suspension. It may also be taken in wafer paper, or even in water, but in this case the bitter flavor is felt. It should always be taken on an empty stomach; after food it often occasions nausea and tinnitus. Its value in acute rheumatism cannot be over-estimated, and should the physician get hold of the case early he will likely be able to conquer it before there is time for cardiac complication, so apt to leave enduring mischief behind it. Finally, when the rheumatic sufferer convalesces the salicin should not be dropped too suddenly. For a week it should be given in full doses morning and evening, and for a fortnight once daily; otherwise a relapse may supervene. A notable feature in the salicin treatment is its tonic effect in promoting a steady and rapid recovery of strength and vigor during convalescence.

It is very cheap, selling in England, at retail, for less than twenty-five cents per ounce.

Acute Articular Rheumatism in Childhood, with a Peculiar Complication.

In a girl, æt. 12, suffering from regurgitation of the mitral valve, there were noticed on some joints, especially at the places of insertions of sinews, small, diffuse, painless spots of thickening; they could be felt especially well on both knee-joints, over the attachment of the quadriceps on the

upper edge of the patella and in both wrists above the styloid process. After the patient had passed through an attack of acute articular rheumatism, these spots of thickening had changed to moderately resisting and somewhat sensitive nodules of the size of a split pea. Besides the places above mentioned, these peculiar appearances were observed also on both external malleoli, on the right elbow above the olecranon, near the spine ilium sep-post on either side, and on the right shoulder-joint below the attachment of the clavicle. The *post mortem* examination revealed them as fibrous nodules with cartilaginous parts; some even showed a bony texture, and some chalky deposits, they evidently being different stages of the same process.

The case was observed in Henoch's clinic (*Berl. Klin Wochens.*, 1883, N. 11), and in a second case also treated there, these nodules were absorbed and totally disappeared. The second case was also that of a twelve-year-old girl.

Antiseptic Inhalations in Phthisis.

Viewing phthisis as caused by micro-organisms and knowing that certain antiseptic drugs have the power of destroying the vitality of organisms, the antiseptic treatment of phthisis would seem theoretically to possess much to recommend it. Dr. Arthur Hill Hassall has instituted some observations on the subject and his results (*Lancet*, May 5, 1883,) are negative. He used carbolic acid, creasote, thymol, and iodine. With the exception of iodine, only a very small amount of the drug was volatilized, the amount found in the vessel at the end of the observation being very nearly equal to that originally used, while the iodine was converted during the process of inhalation into the iodide, and thus lost its antiseptic properties. These results argue against attempting to volatilize these articles, but they do not prove that the insufflation of powders, such as iodoform, may not have a beneficial effect. This is a field of therapeutics but little cultivated as yet.

Poisoning by Salicylate of Soda.

In the *British Medical Journal*, May 5, 1883, Dr. Frank Ogston reports the case of a man who took fifteen grains of salicylate of soda for rheumatism. One hour and a half afterwards he fell asleep, and shortly afterwards became comatose, with contracted pupils; respiration 12, pulse 45, and temperature 98.5. He continued in this condition for sixteen hours, when he died. The remaining powders, upon examination, were found to contain nothing but salicylate of soda. Upon *post mortem*,

no organic lesions of sufficient gravity to account for death could be found, so that Dr. Ogston concluded that death was due to the salicylate. This opinion was doubted by many who heard the report of the case, but no one was able to absolutely disprove it. Such poisonous properties are not usually attributed to this drug, and it would be interesting to know more about the influence of idiosyncrasy in this regard.

The Picric Acid Test for Albumen.

Some physicians having failed to detect albumen with picric acid, when it was to be found with other tests, causes Dr. George Johnson to call attention to the erroneous manner in which they used it, and to enunciate the following caution in the *British Medical Journal*, May 5, 1883:

It should always be borne in mind that, in testing for albumen, the *picric acid must be in excess*. A few drops of a saturated solution of picric acid in a highly albuminous specimen will form a coagulum, which is quickly redissolved; and this explains the fact that one of my correspondents, who poured the picric acid solution on the surface of highly albuminous urine, got an indication of albumen, which soon disappeared. When urine contains much albumen, it should be mixed with its own volume of the picric acid solution; and in testing a fresh specimen, it is better to begin by adding an equal volume of the test liquid.

Treatment of Chordee.

The following prescription has very often been effectual in the hands of M. Mauriac, in the Hospital des Veneriens:

R. Syr. digitalis (fr. cod.),
Syr. morphis (fr. cod.), aa ̄3 iss.
Kalii bromid, ̄3 v.
M. Tablespoonful every evening at bedtime.

Or a suppository as follows:

R. Chloral hydrat., gr. xx.
Ol. theobromæ, q. s. M.
For one suppository.

Or the following injection, recommended by Camillard:

R. Kalii bromid., ̄3 iss.
Tr. opii, ̄3 ss.
Glycerinæ, ̄3 ss.
Aq. distill., ̄3 v. M.
S. 4 injections daily.

Methods of Administering Resorcin.

M. Andeer gives the following prescriptions for the administration of resorcin, which has been experimented with as an antipyretic and antiseptic.

tic in febrile conditions, especially in stomatitis, infantile cholera and diphtheria:

R. Resorcin, gr. vij.—gr. xlv.
Syr. aurantii cort., ℥j.
Aquæ destil., ʒij. M.

S. A tablespoonful of this potion every two hours.

To make an emulsion, seven grains of resorcin may be made up with five drachms of sweet almonds and water to three fluid ounces, and a tablespoonful administered every two hours.

In powder, resorcin may be given in doses of two or four grains in syrup or alone in cachets.

Carbolic Acid in Piles and Fistulæ.

The fact that there is a growing tendency among physicians to the belief that carbolic acid injected into the pile tumors will radically cure and entirely remove them, and that it amounts almost to a specific in fistula, has induced Dr. A. B. Allen, of Jerseyville, Ill., to write to the *Peoria Medical Monthly* for May, 1883, condemning this practice. In conclusion, he says:

"I have met over one hundred cases that had been treated by some one of the above methods before coming to me. The universal verdict has been that it is very painful, and I am certain ineffectual, and a large proportion of them certainly very much debilitated, either from the therapeutical effects of the drug, or from the excruciating pain they had undergone."

The Treatment of Croup.

Dr. Charles J. Fahie writes to the *Brit. Med. Jour.*, May 12, 1883, that out of ten cases of croup treated as follows he did not lose one. He provides that the case must be seen early. A hot bath, a hot poultice of burnt salt to the throat externally, a mustard emetic, and a dose (to be regulated according to the age of the child) of the following mixture every two hours: Tartar emetic, liquor ammoniæ acetatis, and mistura citratis potassæ, to six ounces. The citrate of potash mixture can be made by saturating bicarbonate of potash with citric acid.

Such success raises a question as to the correctness of Dr. Fahie's diagnosis, about which he says nothing.

Solution in Otagia.

The following solution has been highly recommended in ordinary earache, unaccompanied by suppuration or rupture of the tympanum:

R.—Atropiæ sulphat, 20 centigrams.
Aquæ destillat., 25 grams. M.

Four or five drops of this solution may be dropped into the ear, and left there for ten or fifteen minutes, then the cavity of the external ear should be dried with a small pad of cotton wool.

This may be repeated several times, and is given as a heroic remedy in ear troubles. This solution is of course intended for the adult, and should be diluted at least with four times the quantity of water for children under three years of age.

The Nature of Puerperal Fever.

Dr. William Alexander, of Liverpool, believes that puerperal fever is in reality one of the eruptive fevers that has induced septicæmia. Scarlatina, typhus, erysipelas, or typhoid fever appearing in a puerperal woman will often rapidly interfere with the normal puerperal uterine conditions, and produce a disease whose origin is the poison of an eruptive or continued fever, and whose course is that of a modified septicæmia.

He has been contributing some valuable papers on this subject to the *Med. Times and Gaz.* (May 5-12, 1883.)

Swallowing of Shot and Insufflation in the Treatment of Ileus.

From the *London Med. Record*, May 15, 1883, we learn that in three cases (*Gazz. Med. Ital. Lomb.*, February 10, 1883), with well-marked symptoms of invagination of the bowel, obstinate constipation, stercoraceous vomiting, pain, etc., Dr. Pedrini, after other remedies had failed to relieve, made the patient swallow five or six bullets and two kilogrammes of No. 3 shot, at the same time using prolonged and repeated insufflation of air by the rectum. In each case the success of this treatment was complete, relief being quickly obtained, and the patient making a good recovery.

Is Distilled Water in all Cases the Best Vehicle for Eye Lotions?

In the *Practitioner* for May, 1883, Dr. Paul M. Chapman claims that it is not, saying: "I have tried the experiment on myself and on many of my friends, and the answer is always the same, viz., that the introduction of distilled water into the eye is attended with much discomfort and smarting, while with normal saline there is no noticeable effect whatever.

"The practical deduction is this, which I have also verified, that the addition of 2½ grains of chloride of sodium to the ounce of distilled water renders any lotion intended to be of a soothing character much more beneficial."

Ergot in Diabetes Insipidus.

The success which has attended this treatment in the hands of Dr. T. Hammond Williams (*Lancet*, May 12, 1883), would seem to lend some coloring to Dr. Pavy's view of the etiology of the disease (described in our editorial on the subject, p. 666). Two drachms of the fluid extract thrice daily reduced the quantity of urine more than one-half. The cases passed from observation, so that, unfortunately, the permanency of the good results cannot be told.

Insanity in a Child.

The *Alienist and Neurologist*, April, 1883, says that a six years ten months' old child is reported by Berner (*Norsk Magazin for Begeridenkaben*, Bund XII, Hefte 3) to have been attacked by melancholia. The patient was desirous of solitude, very restless and unquiet in slumber, and had hallucinations of sight and hearing. There were at times paroxysms of markedly painful depression. Hereditary history was uncertain, and the patient recovered in a month.

Sub-mucous Chloroform Injections in Toothache.

Gaillard's Med. Jour., May 19, 1883, says that Dr. Guillot (*Progrès Médical*, March 24, 1883), claims to have had very good results in the treatment of toothache from the injection of chloroform beneath the mucous membrane of the gums. The effects are more immediate and lasting than those of morphine. There have been no resultant abscesses or inflammations.

Snake Bites.

In the course of discussion on the "Poison of the Viper" in the *Lancet*, April 28, 1883, Sir Joseph Fayrer, commenting on the excision of the bitten part, says: "In cutting out the part it is necessary to remove all the tissues stained the peculiar red tint caused by snake bites."

CORRESPONDENCE.**Cases of Poisoning.**

EDS. MED. AND SURG. REPORTER:—

Passaic county has its courts a trifle burdened just at present in disposing of cases of poisoning. The second trial of "Aunt Sally" Story for causing the death of Mrs. Feest by giving her strychnia, which she told her was quinine, has just ended in her conviction for manslaughter. The prisoner has a bad record, having been accused of poisoning a neighbor's dog; of threats of poisoning human beings, and of one attempt on human life before the present. The poison had been in the house of the accused for two or three years, and had been seen by two neighbors at different times, Mrs. Story explaining what it

was, and that it was intended for rats and mice. It was wrapped in white paper, and enclosed in an envelope marked "Poison" with blue pencil. Not long prior to the poisoning, she showed the white paper and inclosure to the physician who sometimes attended her, asking him, "Is this marked quinine?" The doctor said not. On tasting it, he said, "It tastes like quinine, but you had better not use it, on account of uncertainty."

Not long subsequently the deceased was drawing water from Mrs. Story's well, and complaining of having the chills, which her physician failed to give quinine enough to cure effectually. Thereupon, Mrs. Story presented her with the powder, saying that it was quinine, and would help her. This was on the evening of September 14th last. The next morning at six o'clock the victim swallowed it, and in fifteen minutes died, with the spasms peculiar to strychnine poisoning.

Mrs. Story, who lived hard by, was informed of the death once or oftener, before 8 a. m., yet two hours later she affected surprise at hearing of it, weeping and making ado about her loss, etc. At the coroner's investigation, she swore that the only strychnine she had had in the house for years was entirely used in destroying minks. This made it very difficult for her to account for its presence in her house, and its accidental (?) substitution for quinine. She has been in prison for eight months, a former trial having resulted in a disagreement of the jury. The present trial attracted few spectators, though it has been distinguished for the legal acumen and ability with which it has been conducted, and for the fairness and perspicuity of the judge's charge. The verdict is universally regarded as just and proper; though the "recommendation to the mercy of the court," secured a sentence generally deemed inadequate.

The trial has thrown a strong light on the lack of care employed in dispensing deadly drugs. A clerk from a leading drug store testified that poison was sold without weighing, a guess being made at the amount to be delivered for a given purpose; that it was enclosed in white wrapping paper, and placed in an envelope, which was marked "Poison" with any marking material most convenient. There was nothing in the color of any of the enveloping materials to indicate the dangerous nature of the contained drug; and no record was kept of the name of the purchaser. The judge, who elicited many of these points, remarked that it would be necessary to be a little more careful, as the late legislature had passed an act bearing upon this matter.

The second case of poisoning includes the family of Robert McLaren, consisting of himself, wife, and three children, together with a boarder named William Black. They were all taken with extreme epigastric pains, vomitings, and some diarrhoea soon after eating the mid-day meal, on Tuesday, May 23d. McLaren is employed in the Rogers Locomotive Works, and in common with some fellow-workmen has a physician to attend by the month, who saw the McLarens soon after the occurrence of the violent symptoms, and subsequently on the evening of the same day. Becoming otherwise engaged, he gave no further attendance until the announcement of the death of John

McLaren, sometime in the morning of the 25th. A second physician having been summoned on the afternoon of the 24th, found the youngest of the McLarens, aged six, affected as above described, and pulseless; Robert McLaren, the father, in a fainting condition; and William Black in a collapse, pulseless, and in a cold sweat. The vomiting of the last had been very frequent and violent, and attended with cramps in the stomach and legs. He complained of a burning in the rectum as if hot water were passing his bowels. All were drinking large quantities of water, which was presently rejected. The pulse, in those in which it was appreciable, was quick. Measures were taken to check the vomiting and support the flagging powers of life, which succeeded in those in whom the pulse had not ceased at the wrist. William Black and John McLaren, exhibiting these symptoms, died between two and three o'clock of the morning of the 25th, a little over a day and a half from the period of attack.

The perpetrator is unknown, but some suspicion has rested upon Wm. Black, who was separated from his wife and other friends; and, having been an inmate of the poor-house, was supposed to be tired of life; he was also said to be at variance with the mistress of the house.

The autopsies, as reported by the daily papers, present some points of interest to the profession. In Black's case, it consisted of an examination of part of the abdominal viscera, and a superficial examination of the lungs. In the case of the child, the viscera of the chest and abdomen were examined, with the exception of the stomach, which was removed but not opened, being reserved entirely for the inspection of the analytical chemist, should one be employed in the case. This is said to be in accordance with the preference of Prof. Doremus in cases of volatile poisons. The autopsies were held in the evening, a circumstance condemned by the very high authority of Virchow.

E. T. BLACKWELL, M. D.

Peterson, N. J., June, 1883.

NEWS AND MISCELLANY.

American Surgical Association.

(Concluded from page 647.)

THIRD DAY.

Dr. S. W. Gross, of Philadelphia, reported

A CASE OF NEPHRECTOMY FOR MEDULLARY CARCINOMA AND PARTIAL CHOLEO-CYSTECTOMY FOR CALCULUS IN THE SAME SUBJECT.

Dr. J. Ewing Mears, of Philadelphia, followed with a paper entitled

CLOSURE OF THE JAWS AND ITS TREATMENT.

Dr. Vanderveer, of Albany, N. Y., now read his paper on

REMOVAL OF MECKEL'S GANGLION FOR THE RELIEF OF TRIFACIAL NEURALGIA.

Dr. J. M. Barton exhibited a splint which he had used for some years for synovitis of the wrist joint.

Dr. David Prince, of Jacksonville, Ill., gave a description of his *rectal obturator*.

Dr. Campbell, of Georgia, gave a description of several cases of

STRICTURE OF THE OESOPHAGUS WITH REMARKS ON TREATMENT.

Dr. Campbell presented some apparatus for fixation of the elbow-joint, devised by Dr. Coleman, of Augusta.

Dr. Bontecue advocated irrigation in cases of cystitis.

OFFICERS FOR 1883-84.

President—Dr. E. M. Moore, Rochester, New York.

First Vice-President—Dr. W. W. Dawson, Cincinnati.

Second Vice-President—Dr. C. H. Mastin, Mobile.

Secretary—Dr. J. R. Weist, Richmond, Indiana.

Treasurer—Dr. J. H. Packard, Philadelphia.

Recorder—Dr. J. Ewing Mears, Philadelphia.

Member of Council—Dr. P. S. Connor, Cincinnati.

The next place of meeting is to be Washington, D. C., on the Wednesday before the meeting of the American Medical Association.

American Medical Association.

The American Medical Association met in annual session in Cleveland, and continued in session June 5, 6, 7 and 8. The address of welcome was delivered by General Edward S. Meyer.

The President, the veteran Dr. John L. Atlee, of Lancaster, then delivered his address, which consisted in a most graphic and interesting description of the condition of our profession sixty-five years ago, when he was a student; it was replete with reminiscences of the distinguished teachers of those by-gone days, and was listened to with great attention.

BUSINESS TRANSACTED.

Drs. J. S. Billings, U. S. A., presented a communication from the President of the British Medical Association and Dr. Mahomed, inviting coöperation with the committee of the Association on the

COLLECTIVE INVESTIGATION OF DISEASE.

Dr. H. D. Didama, of New York, presented a communication from Dr. Tyndale, of New York, containing a petition to Congress, the Secretary of War, and the Signal Service Department, requesting that a committee of five professional gentlemen be appointed to establish

CLIMATIC OBSERVATIONS

at the general health resorts and watering-places, and to collect data in regard to the sanitary value of the localities in regard to pulmonary diseases. Adopted.

Prof. S. D. Gross, of Philadelphia, read a communication signed by himself, Dr. Austin Flint, Jr., and Dr. Oliver Wendell Holmes urging upon the Association the importance of petitioning Congress to provide a suitable fire proof building for the Army Medical Museum and Library.

Dr. H. A. Johnson, of Chicago, then offered a series of resolutions to this effect, in which Congress is asked to make an annual appropriation of \$10,000 for the purchase of books.

The report of the Trustees of the new Journal was read, which shows that they have received

pledges of subscription to the number of 2,500. The journal will be published in Chicago by A. D. Newell & Co. Dr. N. S. Davis, of the same city, will be the editor, and the first number will be issued soon after July 1. The minutes of the meetings will hereafter be published in a small volume, the papers appearing in the Association Journal.

A resolution was offered by Dr. Batchelor and adopted, that the President shall appoint one or more members from each State, whose duty it shall be to secure by petition or otherwise the passage in their respective States of more stringent laws respecting the sale of poisons.

Dr. S. D. Gross, of Philadelphia, offered a resolution that in recognition of the necessity of trained nurses, and the benefit that has arisen from the establishment of training-schools for nurses in large cities, the Association recommends the establishment of similar schools in every county of each State, instruction to be given gratuitously, or at rates which do not exclude the poor from their benefits.

Dr. Walter Hay, of Illinois, moved that a special

SECTION OF PSYCHOLOGICAL MEDICINE be organized. Laid over for one year in accordance with the rules.

The report of the Standing Committee on

ATMOSPHERIC CONDITIONS AND THEIR RELATIONS TO THE PREVALENCE OF DISEASES,

was presented by Dr. N. S. Davis, Chairman. He stated that the work of the Committee was begun as quickly as possible after the last meeting. Observers had been appointed in twelve different parts of the United States, who received instructions to take accurate observations, during the day and night of every day in the year, as well as to note the presence of any organic matter in the air. He then spoke of the necessity of continuing the observations through several years, and closed with a statement of the finances of the Committee.

Dr. S. Pollak, of Missouri, offered a resolution on behalf of the St. Louis Medical Society, to the effect that whereas many of the provisions of the present Code of Ethics are obsolete, and that early revision is necessary, and that no society except the American Medical Association has any power to alter the present Code, but only to ask for its revision; therefore, that the American Medical Association be respectfully requested to appoint a committee of one member from each State, for the purpose of taking into consideration the propriety of revision of the Code of Ethics of the American Medical Association, and report thereon at the meeting of 1884. That this committee be authorized to propose a Code of Ethics, which, in their opinion, will meet the wishes of the profession, and to submit the same at the next annual meeting.

It was immediately moved and seconded, by more than a hundred voices, that these resolutions be laid upon the table, and the motion was carried almost unanimously, amidst loud applause.

The Nominating Committee reported the following nominations of members of the

BOARD OF TRUSTEES OF THE JOURNAL, to fill the positions occupied by those whose term

expires this year, and one to fill the vacancy occasioned by the resignation of Dr. N. S. Davis: A. Garcelon, of Maine; J. O. Hooper, of Arkansas; L. S. McMurtry, of Kentucky; and J. H. Hollister, of Illinois.

THE COMMITTEE OF PUBLICATION

reported that an index of all the volumes of Transactions was now in preparation, of which 1,500 copies would be issued, at a cost of \$500, and would be sold to members at one dollar per volume. The report was received and adopted.

THE COMMITTEE ON NOMINATIONS

presented the following report, which was adopted: President—Austin Flint, Sr., M. D., of New York.

Vice-Presidents—R. A. Kinloch, M. D., of Charleston, S. C.;

T. B. Lester, M. D., of Kansas City, Mo.;

A. L. Gihon, M. D., of U. S. Navy; and

S. C. Gordon, M. D., of Portland, Maine.

Treasurer—R. J. Dunglison, M. D., of Pa.

Librarian—C. H. A. Kleinschmidt, M. D., of Washington, D. C.

Place and Time of Meeting—Washington, on the first Tuesday in May, 1884.

Chairman of Committee on Arrangements, A. Y. P. Garnett, M. D., of Washington.

Assistant Secretary, D. W. Prentiss, M. D., of Washington.

CHAIRMEN OF SECTIONS.

Practice of Medicine—J. V. Shoemaker, of Pennsylvania.

Obstetrics—T. A. Reamy, of Cincinnati.

Surgery—C. T. Parks, of Illinois.

Ophthalmology—J. J. Chisolm, of Baltimore.

Diseases of Children—Wm. Lee, of Indiana.

State Medicine—J. D. Roberts, of Tennessee.

Oral Surgery—T. W. Brophy, of Illinois.

The following were appointed a committee on surgical service aboard steamers and other ocean vessels: Dr. A. N. Bell, of New York; Dr. A. L. Gihon, United States Navy; Dr. J. N. Quimby, New Jersey; Dr. H. O. Marcy, of Massachusetts, and Dr. Henry H. Smith, of Pennsylvania.

ADVANCEMENT IN CREMATION.

Dr. Keller presented the following:

That in the very near future, if not now, cremation will become a sanitary necessity in the large cities and populous districts of the country, and that the question be referred to the section on hygiene, which was done.

Dr. William Bodine and Dr. H. T. Walker were selected as delegates to the Canadian Medical Association meeting.

PAPERS READ.

Dr. Robert D. Murray, U. S. Marine Hospital Service, subject: Yellow Fever.

Dr. Wm. Morrow Beach, Ohio, subject: Milk Sickness.

Dr. W. H. Byford, Chicago, subject: Chronic Intra-Pelvic Inflammation.

Dr. Henry G. Landis, Columbus, Ohio, subject: Post-partum Polypoid Tumors.

Dr. H. O. Marcy, Massachusetts, subject: The Restoration of the Perineum by a New Method.

Dr. R. S. Sutton, Pennsylvania, subject: Enterotomy as a complication in Ovariectomy or Oöphorectomy.

Dr. Reuben A. Vance, Ohio, subject: The Radical Cure of Hernia by a New Method.

Dr. Dudley P. Allen, Ohio, subject: A Comparison of Antiseptic and Non-Antiseptic Methods of Treatment.

Dr. Henry A. Martin, Massachusetts, subject: The Treatment of Synovial Diseases by a New Method.

Dr. Lawrence Turnbull, Philadelphia, subject: Paralysis of the Facial Nerve in Connection with Diseases of the Ear.

Dr. W. C. Jarvis, New York, subject: Tonsillotomy by Ecrasement.

Dr. Carl Seiler, Philadelphia, subject: Action of Nitrate of Silver on the Mucous Membrane of the Throat.

Dr. C. Williams, St. Paul, Minn., subject: Myringitis.

Dr. C. W. Earle, Chicago, subject: Cephalæmatoma in New-born.

Dr. J. H. Hollister, Chicago, subject: The Address in Medicine.

Dr. J. K. Bartlett, Wisconsin, subject: The Address in Obstetrics and Diseases of Women.

Dr. W. F. Peck, Davenport, Iowa, subject: The Address in Surgery.

Dr. Foster Pratt, Kalamazoo, Mich., subject: The Address on State Medicine.

Dr. R. M. Blount, Indiana, subject: Address on Diseases of Children.

Dr. Paul T. Eve, Nashville, Tenn., subject: An Appliance for Keeping the Arm Stationary.

A postal card addressed to the Secretary of the American Medical Association, Dr. Wm. B. Atkinson, No. 1400 Pine street, Philadelphia, will procure the post-office address of any of these gentlemen, and a postal card to any of them will procure a copy of any desired paper; thus freeing our columns from pressure.

Connecticut State Medical Society.

At the recent meeting held in Hartford, May 22d and 23d, the following papers were read:

Author.	Subject.
Dr. W. G. Brownson . . .	President's Address.
" M. H. Henry	Varicocele.
" M. C. White	Micro-spectroscopy.
" W. C. Wile	Extirpation of the Entire Uterus.
" " "	Resection of Hip-joint.
" W. C. Burke, Jr.	Removal of Entire Uterus.
" G. L. Porter	Extra-uterine Pregnancy.
" M. C. White	Vesical Calculi.
" George S. Parmelu	Points in Oral Surgery.
" W. H. Holmes	The Treatment of Pleurisy by Aspiration.
" F. N. Braman	Complications in Labor.
" A. Beardsley	The Treatment of Intermittent Fever.

The Secretary is Dr. S. B. St. John, Hartford, Conn.

Parasites in the Human Body.

We note the following from the *Proceedings of the Med. Soc. of the County of Kings*:

Recent investigations have added greatly to our knowledge of the more highly organized parasites of the helminthoid type. For example, it has

been ascertained beyond doubt that the blood-vessels of a human being capable of performing his daily avocations may contain from 20,000 to 30,000 minute embryo nematoid worms. A physician of Calcutta demonstrated this with regard to persons in that climate. Numbers of individuals so affected suffer from chyluria, or elephantiasis in one or other of its forms; but this is by no means universally the case. Researches have also revealed the curious fact that these teeming multitudes of nematoids lurk in some unknown recesses of the vascular system during the daytime, and that only as night approaches do they wander at large through the vessels generally. Experts assure us that a single drop of blood taken from the prick of a finger at midnight in a person so affected may contain as many as 200 embryo nematoids, while many drops similarly obtained at midday will not reveal a single worm.

Missouri Medical Association.

The following are the officers for the ensuing year.

President—Dr. E. H. Gregory, of St. Louis.

Vice-Presidents—Dr. O. A. Williams, of Morgan county; Dr. John H. Duncan, of Boone county; Dr. J. D. Griffith, of Jackson county; Dr. T. J. Norris, of Macon county; Dr. C. A. Hughes, of St. Louis.

Recording Secretaries—Dr. A. H. Ohmann Dusenil, of St. Louis; Dr. D. V. Wales, of Jasper county.

Corresponding Secretary—Dr. N. F. Essig, of Clinton county.

Treasurer—Dr. C. A. Thompson, of Cole county.

The next meeting of the Association will be at Sedalia.

A Useful Book.

Dr. J. W. McCausland, of Fort Wayne, Ind., pays a deserved compliment to the excellent practical treatise of Dr. F. de Havilland Hall. He writes:

"Why is the work called 'Hall's Differential Diagnosis' not more generally introduced. I think it is far ahead of any other work of its kind. The manner in which the symptoms of kindred diseases are tabulated for convenient comparison renders it at once invaluable, and such I think would be the universal verdict if the book were better known."

Regulating the Practice of Medicine in Minnesota.

A law recently enacted provides that the Faculty of the Medical Department of the Universities of Minnesota shall organize as a Board of Examiners. All persons who practice medicine in the State must present their diplomas to this Board for verification, or if they have no diploma must submit to examination in order to receive a license.

Philadelphia County Medical Society.

At the last meeting of the Philadelphia County Medical Society, held June 13, Dr. W. S. Little read a paper entitled "Condition of the Eyes in Strabismus due to Optical Defects," and Dr. M. Landesberg read a paper entitled "Stretching the Optic Nerve."

Texas Medical Association.

Officers for the ensuing year:

President—Dr. A. P. Brown, of Jefferson.

Vice-Presidents—Drs. T. H. Nott, of Goliad; J. D. Osborne, of Cleburne; Frank Allen, of Lexington.

Secretary—Dr. W. J. Burt, of Austin.

Treasurer—Dr. J. Larendon, of Houston.

Place and time of next meeting, *Belton*, on the last Tuesday in April, 1884.

To Preserve Milk.

In the *Berlin Klin. Woch.*, 1882, No. 5, Ph. Biebert says that milk allowed to remain at a temperature of 100° in a water bath for two hours, will keep sweet and pure for at least six months. It is important to seal it up before placing it in the water bath. The method known as Becker's, which consists in keeping the bath at 60°, is unsatisfactory, as milk thus treated is preserved for only forty-eight hours.

Therapeutic Improvements—Fehling's Test Tablets.

An exceedingly neat form of these tablets is made by John Wyeth & Bro., Philadelphia. As our readers know, they are used for the ready preparation of a test solution of potassio-cupric tartrate for the purposes of urinary analysis. They will be found very convenient in practice.

Iodine.

The combination under this name—the formula of which is published, and the peculiar merit of which is principally owing to the studious care devoted to obtaining perfectly pure and fresh ingredients—has met with much favor in the profession. We notice Dr. Byford, of Chicago, recommends it highly. It is prepared by Battle & Co., St. Louis.

Tennessee State Medical Society.

The following officers were elected for the ensuing year: *President*, Dr. A. B. Tadlock, of Knoxville; *Vice-Presidents*, Dr. A. Morrison, Nashville, and Dr. C. S. Wright, Chattanooga; *Secretary*, Dr. C. C. Fite; *Treasurer*, Dr. D. J. Roberts.

The Chicago Medical Society.

The Chicago Medical Society elected the following officers for the current year: Dr. S. W. Graham, *President*; Dr. R. G. Bogue, *First Vice-President*; Dr. R. Park, *Second Vice-President*; Dr. L. H. Montgomery, *Secretary*, and Dr. E. F. Ingalls, *Treasurer*.

Items.

—Mr. Edison's patents now number 396; more than were ever before granted to one man.

—For making permanganate of potassium into pills, B. S. Proctor (*Pharm. Jour. and Trans.*) recommends China clay and water. The pills keep well, and disintegrate readily in water, yielding the permanganate unchanged.

—It is stated that the Duke Leopold Torlonia has taken in hand the matter of sanitary arrangements of Rome, and will see to the funds being forthcoming.

—Ten tons of linseed meal are used annually for poultices in one of the largest London (England) hospitals, and the yearly bill for lint foots up to over two thousand dollars.

—Asthma cigarettes, made by impregnating tobacco with fluid extract of grindelia, drying, and rolling up in the usual way, are recommended by the *Boston Journal of Chemistry*.

—When John Hunter first tied the femoral artery for popliteal aneurism, he turned around to Mr. Peile and said: "Now, the absorbents are busy below, like mites in a cheese."

—The cost of cremating seven thousand bodies per annum at Bombay is said to be only \$15,000, or rather less than two dollars and a quarter for each corpse.

—An unmarried woman in France administered a teaspoonful of creasote to her infant with a fatal result. The post-mortem appearances were those of an escharotic poison, and the odor of creasote was marked.

—The curious observation has been made by a French writer that the initials of the five elements (in their French names) which enter chiefly into the constitution of organic matter, namely, Carbone, Hydrogene, Azote, Oxygene, and Soufre, spell CHAOS.

—MM. Paul Hélot, surgeon to the Rouen Hospital, and Q. Trouvé, have devised an electric lamp to be worn on the forehead, in the examination of cavities. The light is very intense, and will last for hours.

—The Crown Prince and Princess of Germany, in accepting a fund collected in Germany on the occasion of their silver wedding, have resolved to devote it to the promotion of the welfare of the people, and especially to the improvement of existing sanitary conditions.

—The Signal Service Office estimates that ships containing at least \$13,000,000 of property, besides many lives, were saved from running into the disastrous cyclone in October by the warning it gave. The money thus saved in one storm would pay the expense of the Service for ten years.

—Professor Blackie considers that we have at the present day made a distinct advance in the art of dining, though he admits there are still "fools and beasts in high places" who are a disgrace to humanity. The Professor does not deny that we have vastly improved on the habits of our ancestors in the matter of post-prandial drinking.

—A German doctor, named Senna, recommends bread made with sea-water as a wonderful remedy against scrofula and disorders resulting from insufficient nourishment. Sea-water ought to stand twelve hours before being used for making dough, in order to free it from impurities. Bread made with it has no unpleasant taste.

—A writer in a German paper states that it is the custom in offices in that country to have a sliced potato on the desk for use as a penwiper, and to clean steel pens. It removes all ink-

crusts, and gives a peculiar smooth flow to the ink. New pens should be passed two or three times through the gas flame to remove the grease with which they are coated. The ink will then flow freely.

—Curran, being at a party at the seat of an Irish nobleman, one of the company, who was a physician, strolled out into the churchyard. Dinner being served up, and the doctor not returned, some of the company were expressing their surprise where he could have gone to. "Oh," says Curran, "he has just stepped out to pay a visit to some of his old patients."

—"New Remedies" says odors can be removed from bottles, jars, etc., by washing them with a mixture of powdered black mustard and warm water. Before using this, all visible remains of the former contents should be removed by scalding, scouring, or by agitating shot or pebbles with water in the vessels. Another method is to rinse them with a solution of permanganate of potassium, accompanied or followed by diluted sulphuric acid. In many cases, a solution of chlorinated lime or chlorinated soda will answer the same purpose.

—A method of signaling by means of electric balloons was recently tried in Paris by MM. Mangin and Baudet. The balloon, made of paper rendered translucent, was about 8 feet in diameter and was filled with pure hydrogen. A Swan lamp was fitted inside, and a light rope, carrying two copper wires, was attached. When the circuit was completed, the whole balloon appeared to be a globe of fire. By switching the current off and on, the Morse code can be spelled out, and thus captive balloons of this kind can be used for signaling purposes.

OBITUARY NOTICES.

DR. DAVID PARSONS HOLTON.

Dr. David Parsons Holton, a well-known gynecologist of New York city, died at his late residence, No. 20 Sutton Place, near East Fifty-ninth street, June 7, in the seventy-second year of his age. Dr. Holton had been gradually failing for several months. He leaves a widow, but no children. Dr. Holton was born in Vermont in 1812, and his early education was received in an academy at Bell's Falls, in that State. When about nineteen years old he was appointed Principal of an academy at Southwick, Mass., where he remained two years. Afterwards he came to New York, and graduated from the Medical School of the University of the City of New York. For two years he practiced medicine in Essex county, N. Y., and then returned to New York city to reside. He is said to have used up an estate valued at more than \$50,000 in benevolent projects.

DR. JAMES LENOX BANKS.

Dr. James Lenox Banks died June 3, at his residence, No. 79 Fifth avenue, New York city. He was born at No. 5 Pearl street, May 11, 1832. Dr. Banks matriculated in 1854 at the College of Physicians and Surgeons. He was graduated from that institution in 1857. He pursued the higher branches of his studies in foreign institu-

tions for two years, and in 1859 began the active practice of his profession in New York city. He was a member of the American Medical Association, the New York State Medical Society, the New York Pathological Society, the New York County Medical Society, the New York Academy of Medicine, and the Medico-Legal Society. He was also consulting physician of the Presbyterian Hospital and of the Presbyterian Home for Aged Women. He was a member of the Boards of Trustees of the College of Physicians and Surgeons and the Lenox Library, a member of the Board of Managers of the American Bible Society, and was a member of the American Geographical and New York Historical Societies.

DR. S. G. WOLCOTT.

Dr. Samuel G. Wolcott, of Utica, N. Y., the distinguished surgeon, member of the State Medical Society, and one of its censors for the middle district, died June 4, at the age of 63 years.

DR. W. R. CLAPP.

Dr. William R. Clapp, ex-Grand Treasurer of the Grand Lodge of F. and A. M., and a prominent man, died at his residence in Trenton, N. J., June 6. He was in his 87th year, and was born in New York City, his father being Dr. Allen Clapp, who, for half a century was librarian of the Pennsylvania Hospital at Philadelphia. He had a stroke of paralysis on May 3. He died in sleep.

MARRIAGES.

CRAMPTON—MARLING.—On Tuesday, June 5, at the Fourteenth Street Presbyterian church, New York, by Rev. F. H. Marling, pastor, Henry E. Crampton, M. D., and Ellen Eliza, daughter of the officiating minister.

HASBROUCK—SEWALL.—On Wednesday, June 6, at Dobb's Ferry, N. Y., by Rev. D. L. Marks, Joseph Hasbrouck, M. D., to Mrs. Ellen M. Sewall, daughter of the officiating clergyman.

MELLUS—JENKS.—On Saturday, June 2, at the residence of the bride's father, by Rev. W. R. Huntington, D. D., of Worcester, Mass., Edward Ludon Mellus, M. D., of Worcester, Mass., and May Gardner, daughter of Francis H. Jenks, of this city.

DEATHS.

BANKS.—In New York, on Sunday, June 3, 1883, James Lenox Banks, M. D., aged 51 years.

FUQUA.—At Plano, Collin county, Texas, on May 22, Dr. S. H. Fuqua, a prominent physician.

KARSNER.—At Ocean Grove, June 6, Dr. Charles Karsner, of Germantown, Pa., aged sixty-nine years.

PANCOAST.—At Baltimore, Md., on the morning of June 7, Rebecca A., widow of Joseph Pancoast, M. D.

STROUSS.—At his residence, Amity, Washington county, Pa., on Tuesday, April 24, 1883, S. S. Strauss, M. D., in his 74th year.

STROUSS.—At her residence, Amity, Washington county, Pa., on Wednesday, May 16, 1883, Mrs. A. widow of the late S. S. Strauss, M. D., in her 55th year.

WELLS.—Suddenly, at sea, on the steamship Arizona, on the evening of Friday, April 27, Dr. William Lehman Wells, of this city. Burial at sea.

WOLCOTT.—At his residence, in Utica, on Sunday, June 3, 1883, Samuel Gardner Wolcott, M. D., in the 63d year of his age.

BRASHEAR.—At Akron, Ohio, Sunday, May 27, Catherine Whitacre Brashear, wife of B. B. Brashear, in the 53th year of her age.